A STUDY TO EVALUATE THE EFFECTIVENESS OF LAUGHTER THERAPHY ON DEPRESSION AMONG ELDERLY PERSONS STAYING IN SELECTED OLD AGE HOME, AT DINDIGUL DISTRICT, TAMILNADU.

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A DISSERTATION SUBMITTED TO THE TAMILNADU Dr. M.G.R. MEDICAL UNIVERSITY, CHENNAI, IN PARTIAL FULFILLMENT FOR THE DEGREE OF MASTER OF SCIENCE IN NURSING.

OCTOBER 2016

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INTERNAL EXAMINER **EXTERNAL EXAMINER**

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CERTIFICATE

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”**A STUDY TO EVALUATE THE EFFECTIVENESS OF LAUGHTER THERAPHY ON DEPRESSION AMONG ELDERLY PERSONS STAYING IN SELECTED OLD AGE HOME, AT DINDIGUL DISTRICT, TAMILNADU PROFESSOR IN NURSING”**

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STATEMENT OF THE PROBLEM

" A STUDY TO EVALUATE THE EFFECTIVENESS OF LAUGHTER THERAPY ON DEPRESSION AMONG ELDERLY PERSONS STAYING IN SELECTED OLD AGE HOME, AT DINDIGUL DISTRICT, TAMILNADU"

OBJECTIVES OF THE STUDY

- To compare the level of depression before and after administration of laughter therapy among elderly persons staying in selected old age home.
- To evaluate the effectiveness of laughter therapy among elderly persons staying in selected old age home.
- To find out the association between the pre test level of depression among elderly persons with their selected socio demographic variables.
- To find out the association between the post test level of depression among elderly persons with their selected socio demographic variables.

The conceptual frame work of the present study was developed by the investigator based on Roy's adaptation model.

The review of literature helped the investigator to develop conceptual frame work, determine the methodology for the study, and plan for analysis of the data in the most effective and efficient way.

The research approach adopted for the study was pre-experimental approach. The research design selected for the study was one group

pretest post test, which was used to measure the effectiveness of laughter therapy.

The selection of the sample was done by non-probability purposive sampling technique and the sample consists of 40 elderly persons in Anbalaya old age home at Dindigul district.

The instrument developed and used for the present study was semi-structured interview schedule, which had two sections.

Section A: comprised of 8 items. The items were age, sex, marital status, educational status, number of children, family history of depression, physical illness and length of stay in old age home.

Section B: comprised of Geriatric Depression Scale which consist of 30 items dealing with the level of depression among elderly persons and the total score was 30.

Content validity of the tool was obtained from five experts and the reliability of the tool was r=0.93. the structured teaching module was administered following pretest. Post test was conducted after 7 days. The collected data was analyzed by using descriptive and inferential statistics in terms of frequencies, percentage, mean, standard deviation and chi-square test.

MAJOR FINDINGS OF THE STUDY:

The major findings of the study were summarized as follows,

Findings related to socio demographic variables:

- Among 40 samples, 3(7.5%) of elderly persons were in age group of 60-64 years, 8(20%) of elderly persons were in age group of 65-69 years and 29(72.5%) of elderly persons were in age group of 70-75 years.

- Nearly 34(85%) of elderly persons were females and 6(15%) were males.
- In the study, 2(5%) of elderly persons were unmarried/divorced, 9(22.5%) of elderly persons were got married and 29(72.5%) of elderly persons were widow/widowers.
- Out of 40 samples, 18(45%) of elderly persons were illiterate, 10(25%) of elderly persons were having primary school education, 7(17.5%) of elderly persons having higher secondary education and 5(12.5%) of elderly persons were graduate.
- The study reveals that, 1(2.5%) of elderly persons had no children, 2(5%) of elderly persons had only one children, 20(50%) of elderly persons having 2 children and 17(42.5%) of elderly persons had above 2 children.
- Among 40 elderly persons, 34(85%) of them had the family history of depression, 6(15%) of them had no family history of depression.
- In the present study, 35(87.5%) of elderly persons had a physical illness, 5(12.5%) of elderly persons had no physical illness.
- The study reveals that, 19(47.5%) of elderly persons were staying in old age home for below 1year , 16(40%) of elderly persons were staying in old age home for 1-5years, 5(12.5%) of elderly persons were staying in old age home for above 5years.

Depression level of elderly persons

- Before administration of laughter therapy, none of the elderly persons had normal level of depression, 8(20%) of elderly persons had mild level of depression, 32(80%) of them had severe level of depression.
- After administration of laughter therapy, 10(25%) of elderly persons were had normal level, 30(75%) of them had mild level of depression and none of them had severe level of depression.

Analysis of effectiveness of laughter therapy:

The findings shows that none of the elderly persons had normal level of depression in pretest and 10(25%) of them had normal level of depression after administration of laughter therapy, 8(20%) of them had mild level of depression in pretest and 30(75%) in the post-test, and 32(80%) of them had severe level of depression in pretest but none of them had severe depression after administration of laughter therapy.

The pretest mean score percentage 75.5% of level of depression among elderly persons which is reduced to 28.73% in post-test. It confirmed that there was a decreased the level of depression among elderly persons after administration of laughter therapy. The paired 't' test analysis of the pretest and post-test level of depression t=17.53 (P,0.05, df=1.96) was highly significant. The result evidently supported the effectiveness of laughter therapy on depression among elderly persons staying in selected old age home at Dindigul district.

Relationship between socio demographic variables and pretest level of depression:

The present study revealed that, there was an association between the pretest level of depression to age, sex, marital status, family history of depression and physical illness on elderly persons. But, there was no association between the level of depression and other socio demographic variables such as educational status, no of children and length of stay in old age home.

RECOMMENDATION

- A similar study can be conducted with control group
- A similar study can be conducted by involving students to reduce the level of depression.
- A similar study can be conducted in a geriatric outpatient set up.
- This study can be carried out on the mental disorderly patients in the community set up.
- The study can be carried out among adults in the hospital set up.
- A similar study can be conducted for long duration of intervention.
- A study can be replicated on large population; thereby findings can be generalizable to large population.

INTRODUCTION

CHAPTER-1

INTRODUCTION

"Laughter is the most inexpensive
and the most effective wonder drug.
Laughter is a universal medicine."

-Bertrand Russell.

A cheerful heart is good medicine, but a broken spirit saps a person's strength. Over the years, many physical benefits to laughter have been reported by doctors and health care professionals. Patients are in need of the therapeutic effects of humor and laughter. The ability to see the humor in a situation and to laugh freely with others can be an effective way to take care of our own body, mind and spirit. **(Dr. Madan Kataria, 2012)**

Aging is the process of becoming older. It represents the accumulation of changes in a person over time. Ageing in humans refers to a multidimensional process of physical, psychological, and social change. **(Wikipedia 2012).**

Older people are generally defined according to a range of characteristics including: chronological age, change in social role and changes in functional abilities. **(WHO, 2010).**

An old age home is generally the most commonly referred to option when it comes to considering housing options for senior citizens. A high level of nursing care is available along with an organized, routine of social events and group activities as well as the delivery of meals. A medical practitioner is available to supervise each of the residents' care and nurses are on-site to administer medications and provide general personal care. **(Smudge, 2015).**

Many of the changes have to be faced by people as they grow older such as retirement, death of friends and loved ones, increased isolation, or medical problem which can lead to depression. Depression is a common problem in advancing year, which cause enormous human suffering and interferes with normal day-to-day life. **(Mayo clinic, 2014).**

Mental disorders in elderly persons vary widely, but a conservatively estimated 25% have significant psychiatric symptoms. In mental disorders Depression is the major important disorder affecting majority of people. Major depressive disorder is a common disorder, with a lifetime prevalence of about 15%. **(Baidwin.A, 2012)**

Depression is a combination of symptoms with interferes with one's ability. Major symptoms of depression are persistent sad ,anxious, feeling of guilt, worthlessness, helplessness, loss of interest, loss of appetite, irritability, difficulty in concentrating, forgetfulness, digestive disorder, chronic pain etc. Depression is not a normal or necessary part of aging; there are many steps to be taken to overcome the symptoms. **(Depression health center, 2011)**

Depression is the number one disease today. It is a combination of symptoms that interfere with the ability to work, study, sleep, and eat. It is a disabling condition and can affect a person many times during their life. Depressed people seldom laugh, and laughing people are seldom depressed. **(Laughter yoga University, 2010).**

Depression is the second leading primary care condition after Hypertension in older adults. **(The National Institute of Mental Health, 2003).**

In this modern life caring and sharing relationship with elderly people is lacking in the family. The lack of two-way emotional dialogue and relationship leaves them without emotional grounding, often resulting in feelings of isolation and loneliness. In the modern days parents are not cared by the children, instead they are kept in old age homes which makes elderly still depressed and feel lonely. **(Wilson k. 2001).**

Depression is not a normal part of growing older, and most seniors feel satisfied with their lives. In older adults, depression may go undiagnosed because symptoms - for example, fatigue, loss of appetite, sleep problems or loss of interest in sex may seem to be caused by other illnesses. They may feel dissatisfied with life in general, bored, helpless or worthless. They may always want to stay at home, rather than going out to socialize or doing new things. **(S.Hiremath, 2013)**

The amount of time spent with elders is not what matters; it is the quality of interaction that is important. If there is lack of warmth and friendliness, it leads to anxiety and stress among the elderly. To facilitate better physical and mental health, emotional bonding is necessary. This provides a sense of emotional security which resists stress and depression – the number one sickness in elderly. **(Dr.William Eaton, 2015).**

Relaxation is essential for healing and repairing the psychological and physiological consequence. Inadequate rest worsens stress, especially through impaired mental functioning. In addition to sleep and rest, people can practice techniques to facilitate physical and mental relaxation. In today's stress full world, we need to laugh much more. The power of laughter is unrealized every time we laugh. Laughter is the over-the –counter medicine available 24hrs a day, to cure a variety of physical emotional ailments. Laughter is the human gift for coping and for survival. **(Margarita Tantakovsky, 2012).**

A good Hearty Laughter gets rid of stress, worry and depression. It touches the emotional core and alleviates feelings besides being the panacea for good health; laughter generates positive thoughts and reduces the negative strains. Best of all this it's a priceless medicine. **(R.Morgan griffin, 2011).**

Sense of humor and its use can change our emotional response to stress. Humor can also influence the mind by enhancing the ability to learn. Humor foundation reported that a Brazilian health center is treating patients who suffer from depression, stress and diabetes with "laughter therapy." Patients are encouraged to "laugh out loud together." This report claims that laughter therapy cuts health care costs, burns calories, helps arteries, and boosts blood flow. Laughter Supports Recovery from Illness. Laughter creates predictable physiological changes within the body. Laughter dissolves tension, stress, anxiety, irritation, anger, grief, and depression. **(Melinda smith, 2014).**

Emotional bonding is one of the most powerful tools against depression. Laughter binds people together and increase happiness and intimacy. In addition to the domino effect of joy and amusement, laughter also triggers healthy physical

changes in the body. Laughter strengthens immune system, booster energy, diminish pain and protect from the damaging effect of stress**. (Dr.Bandetti, 2015).**

Role of the nurse in providing care includes not only physical and physiological factors but also psychological and emotional factors. Nurses can play vital role in reducing depression by using complimentary therapies which help the patient to cope with stress and alleviate anxiety. **(Dr.k.Lalitha, 2008).**

Health care settings are not being met. While close to 6% of the older adult population resides in long term facilities, a very little active psychological treatments are available in these settings. Up to 20% of older people live in residential or nursing homes towards the end of their lives. Entry into such institutions is often due to a combination of medical, social and psychological factors. The prevalence of depression in the population is high, though there is an extensive literature to suggest that depression is under diagnosed and under treated and that neither primary nor secondary care services are well coordinated to this common condition. **(Mc Leod, 2004).**

Need for the Study

WHO reports that there are currently about 6000 million elderly person in the world aged 60 years and above. By 2020 approximately 70% of the elderly population will be living in the developing countries. In India there are 76 million elderly people constituting 7.7% of the total population. There are 236 elderly people per 10,000 suffer from mental illness mainly due aging, physical problems, socio-economic factor, cerebral pathology, emotional attitude and family structure. Depression occurs in approximately 10 to 15 percent of all community-dwelling elderly over 65 years of age. The prevalence rate increases from 50 to 75 percent among institutionalized adults.

The world elderly population, which is 70 million in 2011, was estimated to cross 112 million by the year 2016.In India alone the number of people over 60years is expected to touch 60 million in the next census report. The World Health Organization has identified major depression as the fourth leading cause of worldwide disease burden by 2020. **(United Nations Population Fund, 2011)**

A study conducted on global estimation of the elderly population. It revealed that there are 30.2 percent of total population consists of elderly and this will increase to 72 percent by 2050.

The study also reports that the elderly in Asia are also expected to increase from 1 million in 2003 to 7 million in 2050.**(Vartika Saxena, 2012).**

The National Institute of Mental Health's epidemiologic catchment Area **(ECA)** program found that one of the most common mental disorders of elderly are depressive disorders.

According to the report on Global Burden of Disease estimates the point prevalence of unipolar depressive episodes to be 1.9% for men and 3.2% for women, and the one-year prevalence has been estimated to be 5.8% for men and 9.5% for women. It is estimated that by the year 2020 if current trends for demographic and epidemiological transition continue, the burden of depression will increase to 5.7%.

An epidemiological study from rural Uttar Pradesh showed that psychiatric morbidity in the geriatric group (43.32%) was higher than in the nongeriatric group (4.66%) and most common psychiatric morbidity was neurotic depression, followed by manic-depressive psychosis depression, and anxiety state. Psychiatric morbidity was more prevalent in those who were socially, economically, and educationally disadvantaged.

Depression in elderly worsens the outcomes of many medical illness and increases mortality. Environmental factors, such as isolation, care giving and bereavement, contribute to further increased susceptibility to depression or triggering depression in already vulnerable elderly people. Suitable treatment of depression in elderly reduces the symptoms, prevents suicidal ideation, improves cognitive and functional status in order to improve the recovery of a good quality of life, as well as the mortality risk. **(Kerrie Eyers, 2012).**

Laughter therapy is a therapeutic method that uses positive emotions generated by laughter to cure ailments and maintain a healthy body. Due to increased stress, unhealthy diets, reduced exercise and fast lifestyle, our bodies become weak and prone to a variety of diseases. Elderly people can suffer from a variety of diseases due

to their reduced immunity, and a lifelong of unhealthy habits. Although not all diseases would be cured completely, laughter can bring several positive changes in your lifestyle. **(Dr.Madan Kataria, 2011).**

There are plenty of exercises available for our body muscles, but laughing provides a good massage to all internal organs. It enhances the blood supply and increases the efficiency. It has been compared to magic fingers which reach into the interior of the abdomen and massage the organs. **(Laughter yoga university).**

Chhabra and Kar, 2012, studied the profile of psychiatric disorders in elderly psychiatric inpatients and reported that mood disorders were the most common diagnosis (46.5%). Older studies from Gero-psychiatric clinics reported a prevalence of depression ranging from 13 to 22.2%.

As a general rule, non-pharmacological treatment options for depression should always be available. Psychological treatments have been found effective with older adults. In particular cognitive Behavior therapy, interpersonal therapy, problem-solving therapy and humor therapy are effective treatment. Humor therapy is one form of intervention that has been used to alleviate these psychological problems. **(Butter, 2000).**

The elderly are prized resources. We need to create a great awareness to safeguard the health and dignity of vulnerable section of society and help them live the rest of their lives with dignity. Elderly are the most rapidly growing segment of population. **(United Nation Population Fund, 2012).**

Laughter therapy may also help to:

- Improve overall attitude
- Reduce stress/tension
- Promote relaxation
- Improve sleep
- Enhance quality of life
- Strengthen social bonds and relationships
- Produce a general sense of well-being

- (American School of Laughter Yoga, 2014)

Hae-Jin Ko et al., (2011) conducted a study to determine the Effects of laughter therapy on depression, cognition and sleep among the community-dwelling elderly in a community in korea. The total study sample consisted of 109 subjects aged over 65 divided into two groups; We compared Geriatric Depression Scale (GDS) between the two groups before and after laughter therapy. Laughter therapy is considered to be useful, cost-effective and easily-accessible intervention that has positive effects on depression, insomnia, and sleep quality in the elderly.

Eunok Park, (2011) conducted a study to determine the effects of visiting laughter therapy on depression and insomnia in the vulnerable elderly. A quasi-experimental nonequivalent control group pretest-posttest design was used for this study. The instruments included Geriatric Depression Scale and Insomnia Severity Index to measure depression and sleep problems before and after the laughter therapy. The results showed that visiting laughter therapy was effective in decreasing depression and insomnia among the vulnerable elderly.

Statement of the Problem

A study to evaluate the effectiveness of laughter therapy on depression among elderly persons staying in selected old age home, at Dindigul district, Tamilnadu.

Objectives of the study

- To compare the level of depression before and after administration of laughter therapy among elderly persons staying in selected old age home.
- To evaluate the effectiveness of laughter therapy among elderly persons staying in selected old age home.
- To find out the association between the pre test level of depression among elderly persons with their selected socio demographic variables.
- To find out the association between the post test level of depression among elderly persons with their selected socio demographic variables.

Operational definitions

- ***Evaluate***: It refers to the statistical measurement of depression among elderly persons as observed from Geriatric Depression Scale.
- ***Effectiveness***: It refers to the significant reduction of depression as determined by significant difference in pre-test and post-test scores.

- ***Laughter therapy***: It refers to the use of laughter exercises to promote overall health and wellness. It aims to use the natural physiological process of laughter to reduce the depression. It is administered by the means of laughter exercise such as welcome laughter, breathing laughter, milky laughter, greeting laughter and hearty laughter.
- ***Depression***: It refers a disorder that affects a person's mood, physical functions and social interaction as measured by geriatric depression scale.
- ***Elderly***: It refers to the elderly men and women with depression residing in old age home 60-75years of age.
- ***Old age home***: It refers to an institution providing a professional care to the elderly like their residential settings.

Assumption

- Most of the elderly persons may have depression.
- The study subjects may not be aware about laughter therapy.
- Laughter therapy may reduce the depression level of the elderly persons.

Hypothesis

H1: There will be significant difference between pretest and post test level of depression among elderly persons staying in selected old age home.

H2: There will be significant association between pretest level of depression scores with their selected demographic variables.

Delimitations

The study was limited

- to 40 elderly persons
- to elderly persons in the age group of 60-75years
- to elderly persons both male and female
- who were staying in old age home at Anbalaya, Dindigul
- who were willing to participate in the study
- who were present during the period of data collection.

CONCEPTUAL FRAMEWORK

Conceptual framework is a set of concepts and propositions that spell out the relationship between them. The overall purpose is to make scientific findings meaningful and generalizable.

Concepts are the mental images of phenomena and that are the building blocks of the study.

Polit and Hungler,(1999) states that, the conceptual framework is an interrelated concept that are assembled together in some scheme by virtue of their relevance to a common thing. This is a device that helps to stimulate the research and the extention by providing both direction and impetus. The present study was aimed to evaluate the effectiveness of laughter therapy on depression among elderly persons staying in old age home at Dindigul district.

The conceptual framework for this study was adopted from **ROY'S ADAPTATION MODEL** which was designed by **Sr.Callista Roy** in the year (1970). Roy's model focuses on the concept of adaptation. She considered individual as an open system, adjusts with stimuli of self and environment.

Theoretical framework is the overall conceptual understanding of the study. Every study has a framework. In a study, based on the theory, the framework is referred to as theoretical framework. **(Beck.c.t,2003).**

The study based upon **ROY'S ADAPTION MODEL**. The concept is to promote adaptation in the four adaptation modes. According to the model, systems are a set of organized components related to form a whole body; Roy consider the recipients of care to be an open adaptive system.

Input:

According to **ROY'S SYSTEM,** "input" is identified as stimuli which can come from within a person. Stimuli are classified as focal (immediately confronting the person); contextual (all other stimuli that are present); or residual (non-specific such as cultural beliefs, or attitudes about the illness).

Input also includes the person's adaptation level. In the present study the "input" refers to the laughter therapy on depression among elderly persons staying in selected old age home at Dindigul district.

Throughput:

According to the theory, "throughput" refers to the person's processes and effectors. Processes refer to the control mechanisms that a person uses an adaptive system. In the present study, the throughput refers to a process by which there is an effectiveness in the laughter therapy on depression among elderly persons which was demonstrated by the investigator will improves interpersonal relationship, decreases self- esteem, reduced tension and help the person emotionally balanced. Effector refers to the physiologic function, self concept and role function involved in adaptation.

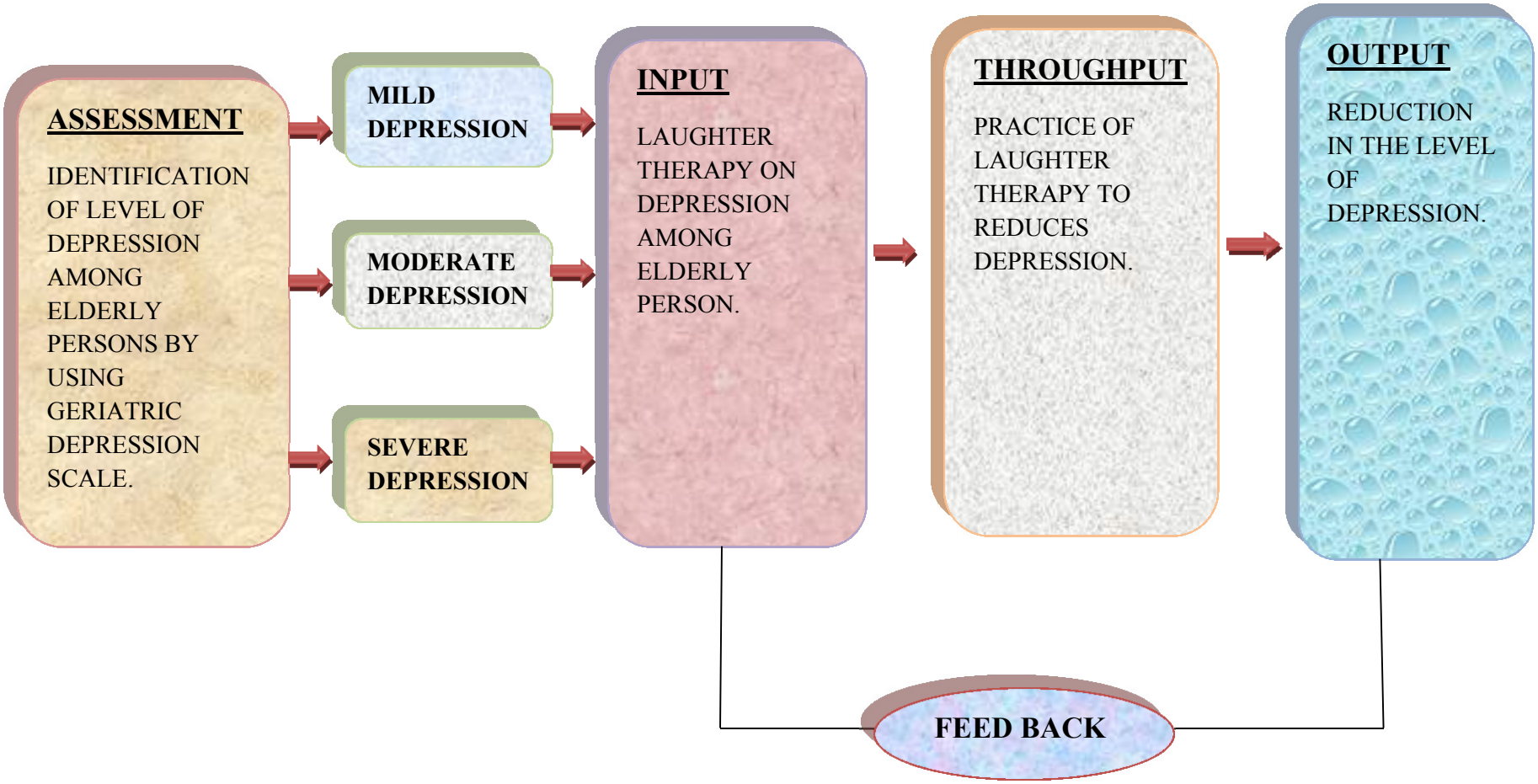
Output:

According to the theory, the "output" refers to the adaptive responses that demonstrate behaviors that achieve the goal or survival, growth. These responses, or output, provide feedback to the system. In the study, the output is based on the reduction in the level of the depression.

Feedback:

As per the theory, "feedback" refers to output that is returned to the system, which allows it to monitor itself overtime in attempt to move closer to a study.

CONCEPTUAL FRAMEWORK BASED ON ROY'S ADAPTATION THEORY



Summary:

This chapter deals with introduction, need for the study, statement of the problem, objectives of the study, operational definition, research hypothesis, assumptions, delimitation and conceptual framework of the study.

REVIEW OF LITERATURE

CHAPTER-2

REVIEW OF LITERATURE

Review of related literature is an integral part of any study of research project. It enhances the knowledge and inspires a clear insight into the problem. Literature review throws light on the studies and their findings reported about the problem under study.

Literature review is defined as a broad, comprehensive, in depth, systematic and critical review of scholarly publication, unpublished printed or audio visual materials and personal communications. **(S.K.Sharma, 2005).**

Review of literature involves identification, location, scrutiny, and summary of written material that contains information on research problems. **(Polit and Beck, 2003).**

A literature review is a body of text that aims to review the critical points of knowledge on a particular topic of research. **(ANA, 2000).**

A literature review is an evaluative report of information found in the literature related to selected area of study. The review describes, summarizes, evaluates and clarifies this literature. It gives a theoretical base for the research and helps to determine the nature of research. **(Queensland University, 1999).**

The investigator carried out extensive review of literature relevant to the research topic to gain insight and to collect information for laying the foundation of the study.

Review of literature was done for the present study and presented in the following headings:

- **Depression**
- **Depression on elderly person**
- **Laughter therapy on depression**
- **Effectiveness of laughter therapy**
- **Effectiveness of laughter therapy on depression among elderly person.**

DEPRESSION

Definition:

Depression is a state associated with the affect (mood) of a person. It is a pathological mood disturbance characterized by feelings, attitudes and beliefs the person has about self and his environment. **(Dr.Bimla Kapoor, 2009, p. 73).**

Depression is an alteration in mood that is expressed by feelings of sadness, despair, and pessimism. There is a loss of interest in usual activities, and somatic symptoms may be evident. Changes in appetite and sleep patterns are common**. (Mary C. Townsend,2007 p.484).**

Incidence:

The life time risk of depression in males 8 to 12% and in females is 20 to 26%. Depression occurs twice as frequently in women as in man. **(R.Sreevani, 2007, p. 96).**

The highest incidence of depressive symptoms has been indicated in individual without close interpersonal relationsahip and in persons who are divorced or separated and widow or widowers. **(Sadock & Sadock, 2003, p. 485).**

Classification:

Depressive disorder may be classified as, single episode or recurrent, mild, moderate or severe, depression with catatonic features, depression with melancholic features, depression with seasonal pattern. **(Mary C. Townsend, 2007, p. 486).**

Etiology:

Various theories such as biological theories, psychological theories, cognitive theories for the etiology of mood disorders exist. The most recent research focuses on chemical biologic imbalances as the cause. Nevertheless, psychosocial stressors and interpersonal events appear to trigger certain physiologic and chemical changes in the brain, which significantly alter the balance of neurotransmitters. **(Sheila L. Videbeck, 2006, pp. 309-310).**

Theories of depression:

Depression is such a profound and devastating human experience that it seems to demand an explanation. There are numerous psychological theories that try to

explain the cause of mood disorders. The nurse should have atleast some acquaintance with a few of the major theories, psychoanalysis theories, object loss theory, learned helplessness theory and cognitive theory and social theories. **(Noreen Cavan Frisch, 2006, pp. 270-271).**

Risk factors:

Depression is so common that it is sometimes difficult to identify risk factors. The generally agreed on risk factors include the following, prior episode of depression, family history of depressive disorder, lack of social support, lack of coping abilities, presence of life and environmental stressors and medical co morbidity. **(Mary Ann Boyd, 2008, pp. 351-352).**

Symptoms of depressive disorder:

Major depressive disorder typically involes two or more weeks of a sad mood or lack of interest in life activities with atleast four other symptoms of depression such as anhedonia, changes in weight, sleep, energy, concentration, decision making, self-esteem and goals, tiredness, worthlessness or guilt inappropriate to the situation, hopelessness, helplessness and suicidal ideation. **(Sheila L. Videbeck, 2006, p. 312).**

A typical depreesive episode is characterized by the following features, which should last for atleast two weeks in order to make a diagnosis: Depressed mood, depressive cognitions, suicidal thoughts, psychomotor retardation, psychotic features, somatic symptoms, difficultics in thinking, concentration, poor memory, and menstrual or sexual disturbances. **(R.Sreevani, 2007, p. 96).**

Treatment:

Psychological treatments such as Individual psychotherapy, Group therapy, Family therapy, and Cognitive therapy. Organic treatment such as Psychopharmacology antidepressants drugs and Electro Convulsive Therapy. **(D. Elakkuvana Bhaskara Raj, 2014, p. 435).**

Depression is the number one disease today. Depressed people seldom laugh, and laughing people are seldom depressed. Laughter Yoga has helped thousands to overcome severe depression all over the world as it uses laughter in the form of physical exercise rather than using cognitive humor. So, even depressed people are

able to laugh. Depression often leads to immobility and a lack of exercise. This can lead to a rapid decline in health and wellness. **(MollyEdmonds,2013).**

Depression among elderly persons:

Aside from major psychotic disorders, delusion can be part of psychotic disorders in elders. Depressed elders may appear confused and cognitively impaired because of the lethargy and psychomotor retardation related to depression. The onset of depression in later life is associated with greater chronicity, relapse, cognitive dysfunction, and an increased rate of dementia. Establishing a supportive and trusting relationship is essential to fostering a positive interview with the geriatric patient. **(Gait W.Stuart, 2009, pp. 690-692).**

Many mental health disorders are seen across the life span. Some conditions most prevalent in older adults. In older adults, physical and mental conditions are intertwined closely. Although many older people maintain highly functional lives, others have deficits associated with normal sensory losses related to aging, failing physical health, difficulty performing activities of daily living, and social deprivation or isolation. A physical illness may first present with psychiatric symptoms; depression may be expressed through physical concerns. Specific physiologic stressors and medical conditions also may trigger depression in older adults. **(Wanda K. Mohr.2006,pp. 818-820).**

Depression is more common in older persons than it is in the general population. Several studies indicate that depression in older persons may be correlated with low socioeconomic status, the loss of a spouse, a concurrent physical illness and social isolation. The under recognition of depression in older persons may occur because the disorder appears more often with somatic complaints in older, than in the younger age groups. Furthermore ageism may influence and cause clinicians to accept depressive symptoms as normal in older patients.**(Kaplan& Sacock's 2009, pp. 214-215).**

The elderly are not a homogeneous group. Each one is a unique person with needs, desires, assets, and support networks. Helps the family members identify and use their own strengths to help elderly relatives. They assess areas such as recent events that may have been stressful, the development history of both the patient and

the family. To respond effectively to the mental health needs of the elderly, nurses must use an integrated approach that takes into account the multiple stressors and the resources available for effective coping. **(Stuart and Sundeen,1990, pp. 256-257).**

Tomita A etal., (2013) conducted a study on Depression, disability and functional status among community-dwelling older adults in South Africa. This study examined the relationship between depression and functional status among a community-dwelling older population of 65 years and older in South Africa. Depression was assessed using the 10-item version of the Depression Scale. This study results revealed that there was a significant association between depression and functional dependence, but the relationship between depression and functional status.

Helvik AS et al., (2012) conducted a study to assess the prevalence on Depressive symptoms among the medically hospitalized older individuals- a 1year follow-up study, in Norway. The present follow-up study of depressive symptoms at 1-year follow-up and furthermore explored whether depressive symptoms at follow-up was associated with change in the medical, functional or emotional situation between baseline and follow-up. Information was collected at baseline and follow-up using the Hospital Anxiety and Depression scale (HAD). The incidence of depressive symptoms at follow-up was 5%. This study results revealed that the 1-year follow-up study of older medical inpatients contributes to the research body regarding risk factors of depression in older people.

Hidaka S et al., (2011) conducted a study on Prevalence of depression and depressive symptoms among older Japanese people: co morbidity of mild cognitive impairment and depression. The aim of the study was to estimate the prevalence of DSM-III-R major depressive episodes (MDEs), depressive symptoms cases (DSCs) and coexisting mild cognitive impairment (MCI). Prevalence was estimated based on screening evaluation, individual interviews, and door-to-door visits. Subjects with MCI (26.3%) were more likely to develop depression compared with those with normal cognitive function (18.0%). This study results revealed that MCI was more prevalent in subjects with depression than those with normal mood.

Yun-Fang Tsai et al., (2007) conducted a study on Self care management and risk factors for Depressive Symptoms among Taiwanese Institutionalized older

persons, in Taiwan. A cross sectional design was used. Two of 18 public elder care homes were chosen by random sampling. The Chinese version of the short form Geriatric Depression Scale was used to measure depressive symptoms. This study results revealed that depressed older persons tended to use significantly more self management strategies and reported lower effective levels for these strategies than non depressed elders.

Laughter therapy on depression:

Laughter is the Best Medicine. Laughter is a powerful antidote to depression, stress, pain, and conflict. **Laughter relaxes the whole body.** A good, hearty laugh relieves physical tension and stress, leaving your muscles relaxed for up to 45 minutes after. **Laughter boosts the immune system.** Laughter decreases stress hormones and increases immune cells and infection-fighting antibodies, thus improving your resistance to disease. **Laughter triggers the release of endorphins,** the body's natural feel-good chemicals. Endorphins promote an overall sense of well-being and can even temporarily relieve pain. **(Paul E. McGhee., PhD. 2014).**

Approaches to laughter such as Laughter Wellness and Laughter Yoga that do not rely on humor are ideal for seniors to help them reap the many benefits of laughter to improve their health and wellbeing because there is very little to understand. A minimum of cognitive skills are required. As little as one hour of practice per week (more is of course better) helps to increase memory, thinking ability and intellectual capacity. Many people with depression, anxiety and chronic stress related diseases have reported moving from debilitating fear and anxiety to a more positive state of mind, transforming their quality of life. Physical fitness stemming from laughter is a benefit known to few. When you laugh, all your body systems are affected in a positive manner. **(Stangler hdindigulz, 2013).**

Mental and physical state of health is positively influenced by laughter. Laughter Yoga is indeed the best medicine to be prescribed for seniors to keep them in good cheer. A good Hearty Laughter gets rid of stress, worry and depression. Elderly people suffer from a variety of diseases due to their reduced immunity, and a lifelong of unhealthy habits. Although not all diseases can be cured, laughter brings several positive changes. This provides a sense of emotional security which resists

stress and depression – the number one sickness in seniors. A smile goes a long way to establish a bond with seniors who are in need of care and empathy. Exercises are simple, structured and entertaining. They are easy and safe, and provide a genuine form of physical exercise. People's participation is invited and not imposed. Laughter Yoga appears to lift depression and replace it with a positive outlook. **(Tjasa CEPON,2012).**

Effectiveness of laughter therapy:

Freda DeKeyser Ganz et al., (2013) conducted a study to evaluate the effect of humor on elder mental and physical health. A convenience sample of community-dwelling older people attending senior centers was asked to participate in a quasi-experimental study to examine the impact of a humor therapy workshop on physical and mental health. The sample consisted of 92 subjects, 42 in the control group and 50 in the workshop. This study results revealed that subjects in the workshop had significantly lower follow-up levels of anxiety and depression and improved general well-being.

Sujith chandran, (2009) conducted a study to assess the effectiveness of aerobic laughter therapy and stress among police personnel in a pre-experimental research design in kerala. The data was collected by self administered questionnaire. There was significant association between the mean difference organizational police stress and among police personnel. This study results revealed that the aerobic laughter therapy was significantly effective to reduce the operational police stress.

Lakhwinder Kaur et al., (2008) a quasi experimental study was conducted in the National Institute of Nursing Education PGIMER, Chandigarh with an objective to evaluate the effect of laughter therapy on the stress level of nursing students. Experimentation involves administering laughter therapy for 15-20 minutes daily. During ten days, laughter therapy has shown positive effect on reducing the stress level of subjects at statistically significant level (tcal 32, df 41, $p>0.05$) mean stress score was decreased from 112 to 103 after the laughter therapy.

Mary P. Bennett et al., (2003) conducted a study to evaluate the effect of mirthful laughter on stress and natural killer cell activity, at Midwestern city. The study design was Randomized, pre-post test with comparison group. Main Outcome

Measures was Self-reported stress and arousal (Stress Arousal Check List), mirthful laughter (Humor Response Scale), and immune function (chromium release natural killer [NK] cell cytotoxicity assay). This study results revealed that Laughter may reduce stress and improve NK cell activity.

Effectiveness of laughter therapy on depression among elderly person:

Fariba Ghodsbin et al., (2014) conducted a study to evaluate The effects of Laughter Therapy on general health of Elderly people referring to Jahandidegan community center in Shiraz, Iran. In a randomized controlled trial, we enrolled 72 senior citizens aged 60 and over. The participants of experimental group attended a laughter therapy program consisting of two 90-minute sessions per week. This study results revealed that statistically significant correlation among laughter therapy, social dysfunction and depression.

Eden I. Beltran et al., (2013) conducted a study to determine the effectiveness of Laughter Yoga therapy in decreasing the level of depression among Institutionalized geriatric clients, in Quezon, a quasi-experimental design was utilized. Ten participants were purposely selected for pre-testing, Laughter yoga therapy was conducted for 30 minutes a day, Post-test was done at the end of week. This study results revealed that significant difference in the level of depression, Laughter yoga therapy is an effective intervention in decreasing the level of depression of the institutionalized geriatric participants.

Yeon-Ja Ko et al., (2013) conducted a study to evaluate the effects of Laughter Therapy on Pain, Depression, and Quality of Life of Elderly People with Osteoarthritis, in korea. A quasi-experimental, nonequivalent control group pretest-posttest design was used. Experimental group (n=30) participated in laughter therapy four times, once a week for 50 min per session. This study results revealed that laughter therapy is an effective intervention to reduce the pain and depression, and to improve quality of life.

Brigitte Konradt et al., (2012) conducted a study to Evaluation of a standardized humor group in a clinical setting: a feasibility study for older patients with depression, in Germany. An experimental group with treatment (49 patients) was compared with a control group with no treatment (50 patients) in a semi-randomized

design. A set of questionnaires (Geriatric Depression Scale) was administered pretreatment and post treatment. This study results indicate an additional benefit of this specific therapeutic intervention for older.

Mojtahed A et al., (2011) conducted a study on Laughter yoga versus group exercise program in elderly depressed women: a randomized controlled trial. Seventy depressed old women who were members of a cultural community of Tehran were chosen by Geriatric depression scale. The analysis revealed a significant difference in decrease in depression scores of both Laughter Yoga and exercise therapy group in comparison to control group. This study result revealed that Laughter Yoga is at least as effective as group exercise program in improvement of depression and life satisfaction of elderly depressed women.

Mahvash Shahidi et al., (2010) conducted a study "Laughter Yoga" and its effect on older depressed women, in **Iran.** This study compares Laughter Yoga to group exercise therapy in their benefits to the life of older adult women. A Geriatric Depression Scale (GDS) questionnaire with 30 questions was used to test the degree of depression. The results show that laughter therapy have similar success in reducing depression as exercise therapy. This study results revealed that Laughter Yoga is a definite recommendation for non-invasive therapy with none of sthe negative side effects that are so common at an older age.

Hyun Wook Jung et al., (2009) conducted a study to evaluate The effect of Laughter Therapy on sleep in the Community-dwelling Elderly, in Daegu. This study was performed to evaluate improvement of sleep quality after laughter therapy. There were 48 subjects in the experimental group and 61 in the control group. The laughter therapy program was applied to the experimental group. The comparison of Insomnia Severity Index (ISI) and Pittsburgh Sleep Quality Index (PSQI) before and after laughter therapy. This study results revealed that the laughter therapy is considered to be useful for the elderly people in a community that improves insomnia and sleep quality.

Walter M et al., (2007) conducted a study to evaluate the effectiveness of Humour therapy in patients with late-life depression or Alzheimer's disease, in Germany. The aim of the study was to investigate the impact of humour therapy on

quality of life in patients with depression or AD. Twenty patients with late-life depression and 20 patients with AD were evaluated. Ten patients in each group underwent a humour therapy group (HT) once in two weeks for 60 min in addition to standard pharmacotherapy, which was given as usual to the other group as standard therapy (ST). This study results revealed that Depressive patients receiving HT showed the highest quality of life after treatment, humour therapy can provide an additional therapeutic tool.

Summary:

This chapter dealt with literature related to depression, depression on elderly person, laughter therapy on depression, effectiveness of laughter therapy, effectiveness of laughter therapy on depression among elderly person. The literature review helped the investigator to become aware of the various methodologies administered in Laughter therapy related studies. It helped the investigator to state the problem clearly, establish the need for the study, develop a conceptual frame work, develop the tool and achieve the objective of the study.

RESEARCH METHODOLOGY

CHAPTER-3

RESEARCH METHODOLOGY

Research methodology involves systematic procedure in which the research starts from initial identification of problem to its final conclusion. The role of methodology consists of procedure and techniques for conducting a study. **(Polit and Hungler, 2005).**

Methodology of research refers to investigation of the way of obtaining, organizing and analyzing data methodological studies address the development, validation and evaluation of research tools (or) methods. **(Polit and Beck, 2006).**

This chapter deals with the description of methodology and various steps which are undertaken for gathering and organizing data for the investigation to evaluate the effectiveness of laughter therapy on depression among elderly persons staying in old age home at Dindigul district.

Research methodology is a way to solve the research problems systematically. It includes research approach, research design, variables under the study, setting of the study, population, sample and sampling techniques which includes the selection and development of the tool, description of the tool, development of effectiveness of laughter therapy, validity of the tool, the tool, reliability of the tool, pilot study, data collection procedure and plan of data analysis.

Research approach:

A research approach tells the researcher from whom to collect the data, how to collect the data, and how to analyze them. It also suggests possible conclusions and helps the researcher in answering specific research question in the most accurate and efficient way possible. **(Nancy and Grovve, 2005).**

The purpose was to assess the effectiveness of laughter therapy on depression among elderly persons staying in old age home. Quasi -experimental approach was used to assess the effectiveness of laughter therapy on depression among elderly persons.

Research design:

Research design is the overall plan for collecting and analyzing data, including specifications for enhancing the internal and external validity of the study. **(Polit and Hungler,2005)**

Research design adopted for the study was one group pre-test post-test design **(O_1-X-O_2),** it is the quasi-experimental design. In this design, the investigator introduces base measures before and after treatment. This design is widely used in educational research.

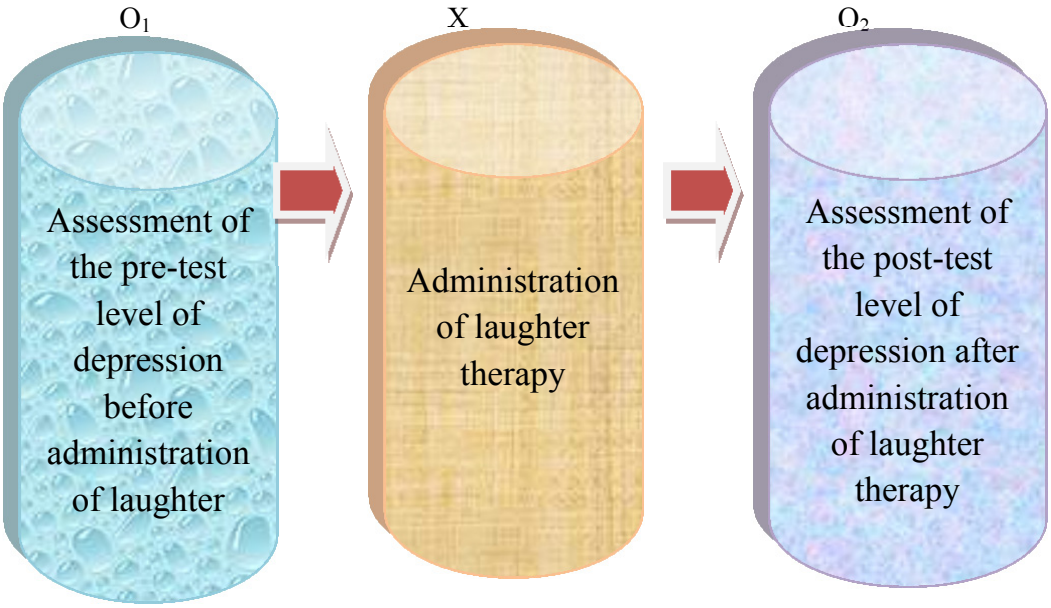
In this study, one group pre-test post-test design was used for assessment of the level of depression, before and after administration of laughter therapy on depression among elderly persons. The level of depression regarding laughter therapy was again assessed using the same tool. The difference in the score was examined to evaluate the effectiveness of laughter therapy.

The design adopted for the present study can be represented as

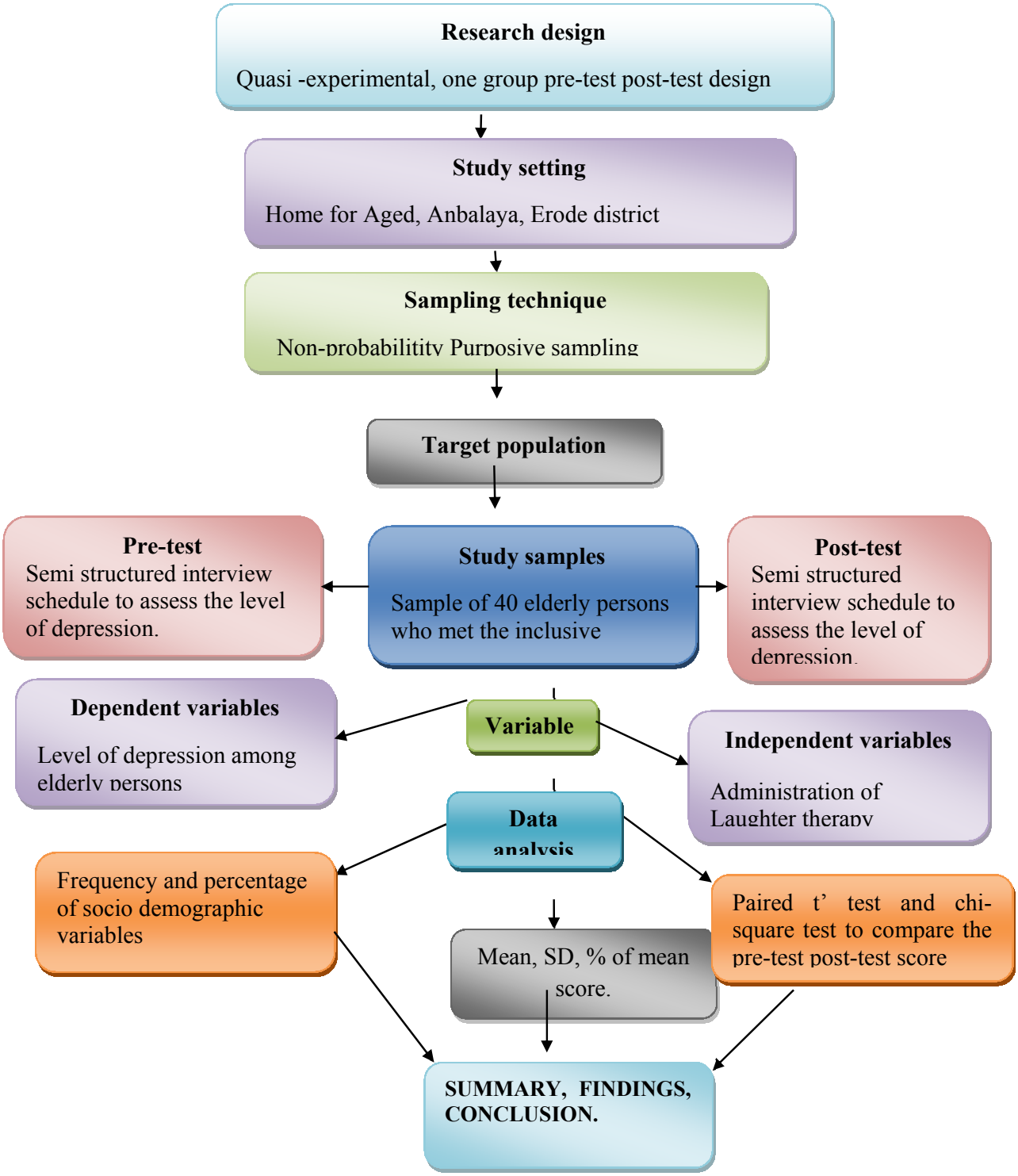
O_1 = Level of depression before administration of laughter therapy.

X = Administration of laughter therapy.

O_2 = Level of depression after administration of laughter therapy.



SCHEMATIC REPRESENTATION OF THE RESEARCH DESIGN



Variables under the study:

Independent variable:

In the present study, the independent variable was laughter therapy among elderly persons.

Dependent variable:

In the present study, dependent variable refers to the level of depression.

Attributed variable:

Age, sex, marital status, educational status, number of children, family history of depression, physical illness, length of stay in old age home.

Study setting:

Researcher makes decision about where to conduct the study based on the nature of research question and the type of information needed to support it. Settings are the more specific places where data collection occurs. **(Polit and Beck, 2004).**

The study was conducted in Anbalaya, old age home, Dindigul district. The old age home was about 10 kms from the college and the study was conducted in old age home. Anbalaya old age home was started in 1986. The home was depending on the public charity. They care for 250 elderly and everything was done for them to keep them comfortable and even the diet is given accordingly.

Target population:

Target population is the entire population in which the researcher is interested and would like to generalize the results of the study. **(polit and Beck, 2004).**

Target population for the present study comprised of elderly persons.

Sample and sampling technique:

Sample is a subset of a population selected to participate in the study to generalize population characteristics. Sampling refers to the process of selecting a portion of the population to represents the entire population. **(Polit and Beck, 2006)**

The sample size of the present study comprised of 40 elderly persons who met the inclusive criteria was selected.

The samples were selected by using Non-probabilitity purposive sampling techniques.

Criteria for the selection of the sample:

Inclusion criteria:

Elderly persons

- in the age group of 60 to 75 years
- including both male and Female
- who are willing to participate in this study
- who are available during the study
- who were staying in old age home, Anbalaya, at Dindigul.

Exclusion cretiria:

Elderly people those who are

- suffering with mental disorders except depression
- in the age group of above 75.

Selection of the instrument:

Research instrument also called research tools, are the devices used to collect data, which facilitates the observation and measurement of variables. **(RoseMarie Nieswaiadomy,1993).**

Geriatric Depression Scale was used to assess the level of depression and it is used as a research tool in this study and according to the score the elderly persons were divided into the level of depression. Normal level of depression (0-9), mild level of depression is grouped under (10-19), the severe level of depression is grouped under (20-30). The total score was 30. Hence it is considered to be the most appropriate instrument to elicit the responses from subjects.

Development of the tool:

The tool used for the study comprised of,

- Semi-structured questionnaire with Geriatric Depression scale
- Laughter therapy.

Preparation:

The steps selected for the preparation of tool was,

- Review of related literature
- Expert opinion

Review of related literature:

Literature related to topic available from books, journals, periodicals, published and unpublished research studies and articles were reviewed to develop the tool.

Expert opinion:

The content was given to 3 experts in the field of Psychiatric Nursing, from one Psychiatrist and statistician. Their opinion and suggestion were taken to modify the content. The research consultant and guide were consulted when finalizing the tool.

Description of the instrument:

Part-I

The instrument consists of two sections.

Section A: Socio demographic data consists of 8 items. The items were age, sex, marital status, educational status, number of children, family history of depression, physical illness and length of stay in old age home.

Section B: Section B consists of Geriatric Depression Scale which consist of 30 items dealing with the level of depression among elderly persons and the total score was 30.

Part-II

A famous Chinese saint named "Hotei" invented the laughter therapy nearly 3000 years ago. A laughter therapy is an excellent type of exercise, can do alone or in a group.

Laughter therapy, also called Humor therapy, is the use of humor to promote overall health and wellness. It aims to use the natural physiological process of laughter therapy helps to reduce depression.

Validity of the instrument:

Validity the most important simple methodological criteria for evaluating and measuring instrument. Validity reflects accurate measure yields information about the true or real variable being studied. **(Carol Mince, 2004)**

The content validity of the instrument was assessed by obtaining opinion from 3 experts in the field of Nursing, from one Psychiatrist and statistician. The experts suggested simplification of language, reduction of certain items and reorganization of

certain items. Appropriate modifications were made accordingly and the tool was finally modified.

Reliability of the instrument:

Reliability of research instrument is defined as the extent, to which the instrument yields the same results on repeated measure. **(Polit and Beck, 2006).**

Geriatric Depression Scale was used to assess the level of depression among elderly persons. The reliability of the Geriatric Depression Scale was tested by implementing the Geriatric Depression Scale on 4 elderly persons staying in Sivabakkiam old age home at Namakkal. Test– retest method where Karl pearson's correlation formula was used to find out the reliability of the Geriatric Depression Scale.

Preparation of the final draft:

The final draft of the Geriatric Depression Scale and laughter therapy was prepared after testing the reliability and validity.

Pilot study:

A pilot study is a small version done in preparation for a main study. **(Polit and Hungler, 2004).**

After obtaining permission from the concerned authority the pilot study was conducted in the month of May 2015 at Sivabakkiam old age home at Namakkal district.

The purpose of the pilot study was to evaluate the effectiveness of laughter therapy on depression among elderly persons, to find out the feasibility of conducting the final study and to determine the method of statistical analysis. Four elderly persons were assessed by using non-probabilitity purposive sampling technique. The pre-test was given using Geriatric Depression Scale to assess the level of depression. Post-test was conducted with the same tool after 7 days. The results of the study revealed that the study was feasible.

Data collection procedure:

Ethical consideration:

Prior to the collection of data, written permission was obtained from the concerned authority of the old age home, Anbalaya at Dindigul. The elderly persons were assured that anonymity of each individual would be maintained and informed consent was obtained from elderly persons.

Period of data collection:

The data was collected from 40 elderly persons from 01.06.2016 to 30.06.2016 in old age home, Anbalaya, at Dindigul.

Pretest:

Pretest was conducted among 40 elderly persons staying in old age home, Anbalaya at Dindigul by using Geriatric Depression Scale to assess the level of depression.

Administer the laughter therapy:

After pretest 40 elderly persons divided into 4 groups. Each group consists of 10 persons. Administer the laughter therapy for 1 week to each group. Administer the laughter therapy for 30-45minutes per day.

Evaluation of laughter therapy/ Post test:

The post test was conducted with same Geriatric Depression Scale after 1 week. The results of the study revealed that the study was feasible.

Plan for analysis:

The data obtained are to be analyzed in terms of objectives of the study by using descriptive and inferential statistics. The plan for data analysis as follows,

- The frequencies and percentage for the analysis of socio demographic variables
- Mean, mean score percentage and standard deviation measures were used to analyze the pretest and post test level of depression
- Paired t' test was used to determine the significant difference between mean pretest scores and mean post test scores
- Chi –square test was used to determine the association between selected socio demographic variables and pretest level of depression.

Summary:

This chapter dealt with the methodology undertaken for the study. It includes research approach, research design, setting of the study, target population, sampling technique, selection and developmental of the tool pilot study, validity and reliability, data collection method and plan for data analysis.

DATA ANALYSIS, INTERPRETATION & DISCUSSION

CHAPTER-IV

DATA ANALYSIS, INTERPRETATION AND DISCUSSION

The chapter deals with analysis and interpretation of data collected from a sample of 40 elderly persons who underwent laughter therapy after assess the level of depression by using Geriatric Depression Scale. The data which are necessary to provide to the adequacy of the study where collected through semi-structured interview schedule and analyzed using relevant descriptive and inferential statistics. The substantive summary of the findings are arranged in line with the objectives of the study.

Data analysis means the systematic organization and synthesis of research data and the testing of research hypothesis using those data. (Polit&Beck,2008).

Objectives:

- To compare the level of depression before and after administration of laughter therapy among elderly persons staying in selected old age home.
- To evaluate the effectiveness of laughter therapy among elderly persons staying in selected old age home.
- To find out the association between pre test level of depression among elderly persons with their selected socio demographic variables.
- To find out the association between post test level of depression among elderly persons with their selected socio demographic variables.

Presentation of data:

The analysis of data is organized and presented under the following broad headings

Section-I: Description of socio demographic variables of elderly persons in frequencies and percentage analysis.

Section-II: Assessment of pretest and post-test level of depression before and after administration of laughter therapy among elderly persons staying in selected old age home at Dindigul district.

Section-III: Comparison of level of depression before and after administration of laughter therapy among elderly persons staying in selected old age home at Dindigul district.

Section-IV: Effectiveness of laughter therapy on depression among elderly persons staying in selected old age home at Dindigul district.

Secton-V: Association between the pretest level of depression among elderly persons with their selected socio demographic variables such as age, sex, marital status, educational status, no of children, family history of depression, physical illness and length of stay in old age home.

SECTION-I

Description of socio demographic variables of elderly persons who undergone laughter therapy

Table 4.1.1 Distribution of elderly persons according to their age.

N=40

S.No	Age in Years	Number(40)	Percentage (%)
1	60-64	3	7.5
2	65-69	8	20
3	70-75	29	72.5
Total		**40**	**100**

The **table 4.1.1 and figure 4.1.1** represents the frequency of subjects according to their age. Among them majority, 29(72.5%) of elderly persons were in age group of 70-75 years. 8(20%) of elderly persons were in age group of65-69 years and 3(7.5%) of elderly persons were in age group of 60-64 years.

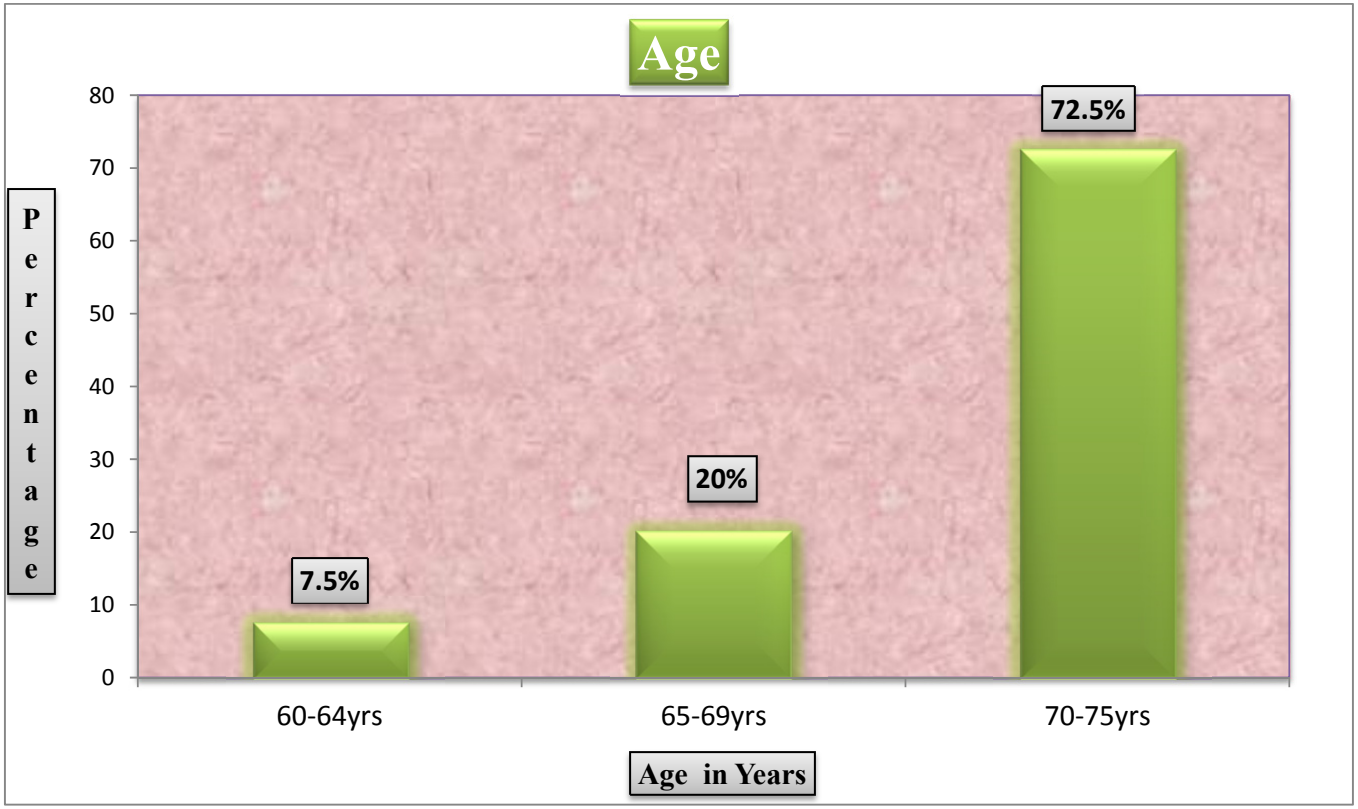


Figure 4.1.1 Distribution of elderly persons according to their age.

Table 4.1.2 Distribution of elderly persons according to their sex.

N=40

S.No	Sex	Number (40)	Percentage(%)
1	Male	6	15
2	Female	34	85
Total		**40**	**100**

The **table 4.1.2 and figure 4.1.2** represents the frequency of subjects according to their sex, among 40 persons, 34(85%) were females and 6(15%) were males.

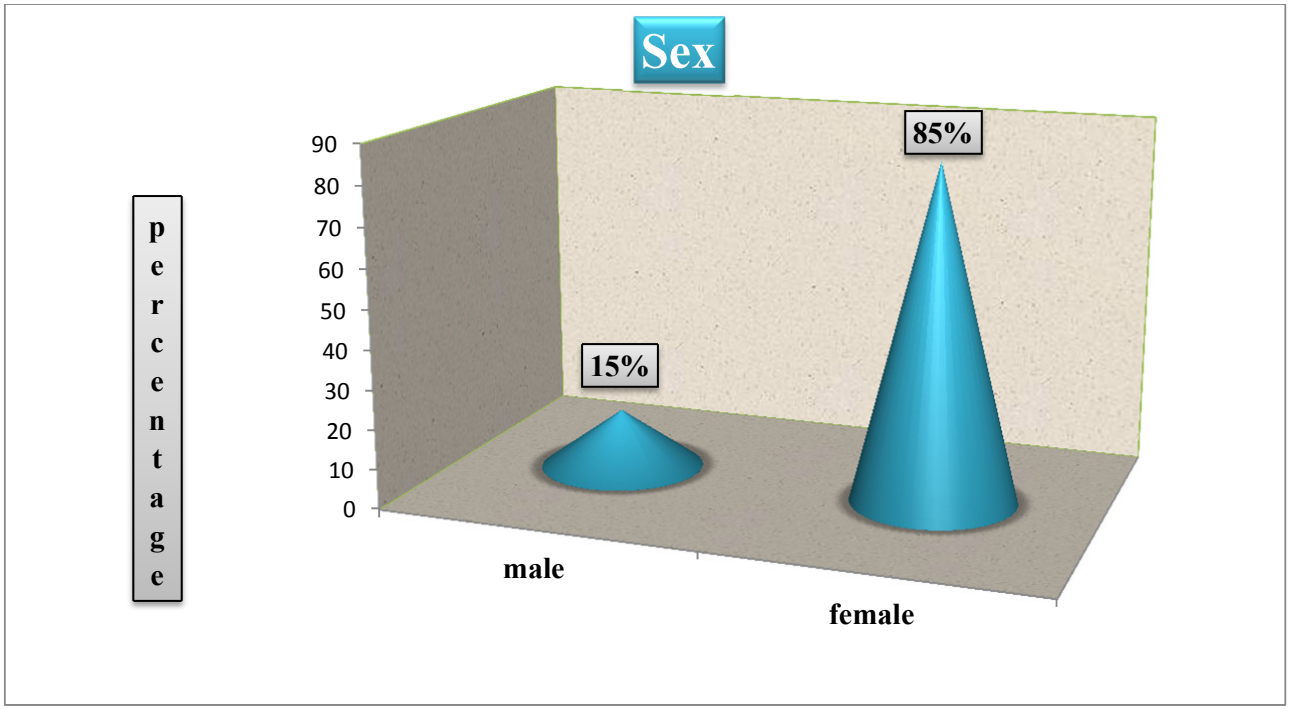


Figure 4.1.2 Distribution of elderly persons according to their sex.

Table 4.1.3 Distribution of elderly persons according to their marital status.

N=40.

S.No	Marital status	Number(40)	Percentage(%)
1	Unmarried/ divorced	2	5
2	Married	9	22.5
3	Widow/ widowers	29	72.5
Total		**40**	**100**

The **table 4.1.3 and figure 4.1.3** represents the frequency of subjects according to their marital status. Among them majority, 29(72.5%) of elderly persons were widow/widowers. 9(22.5%) of elderly persons were got married and 2(5%) of elderly persons were unmarried/divorced.

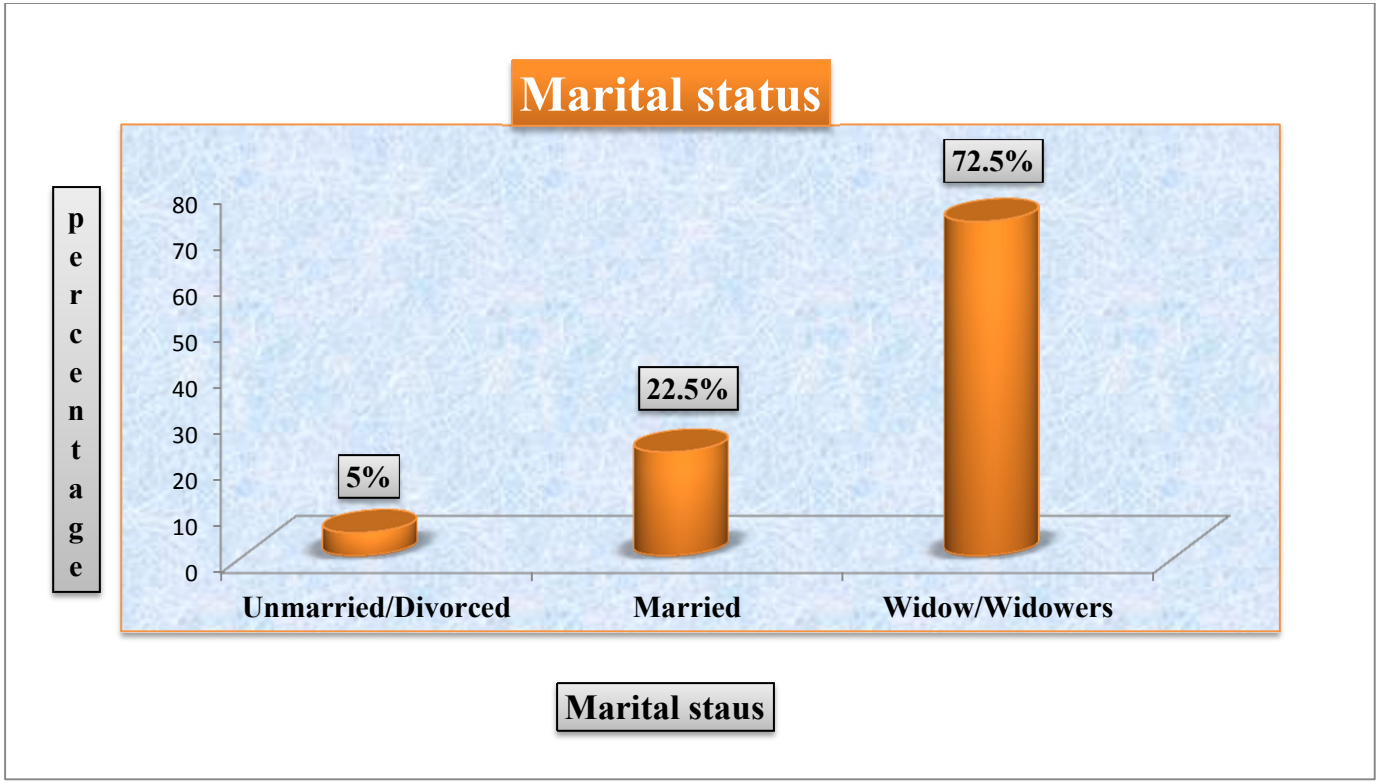


Figure 4.1.3 Distribution of elderly persons according to their marital status.

Table 4.1.4 Distribution of elderly persons according to their educational status.

N=40.

S.No	Educational status	Number (40)	Percentage (%)
1	Illiterate	18	45
2	Primary school	10	25
3	Higher secondary	7	17.5
4	Graduate	5	12.5
Total		**40**	**100**

The **table 4.1.4 and figure 4.1.4** represents the frequency of subjects according to their educational status. Among them majority, 18(45%) of elderly persons were illiterate. 10(25%) of elderly persons had primary school education, 7(17.5%) of elderly persons had higher secondary education and 5(12.5%) of elderly persons were graduate.

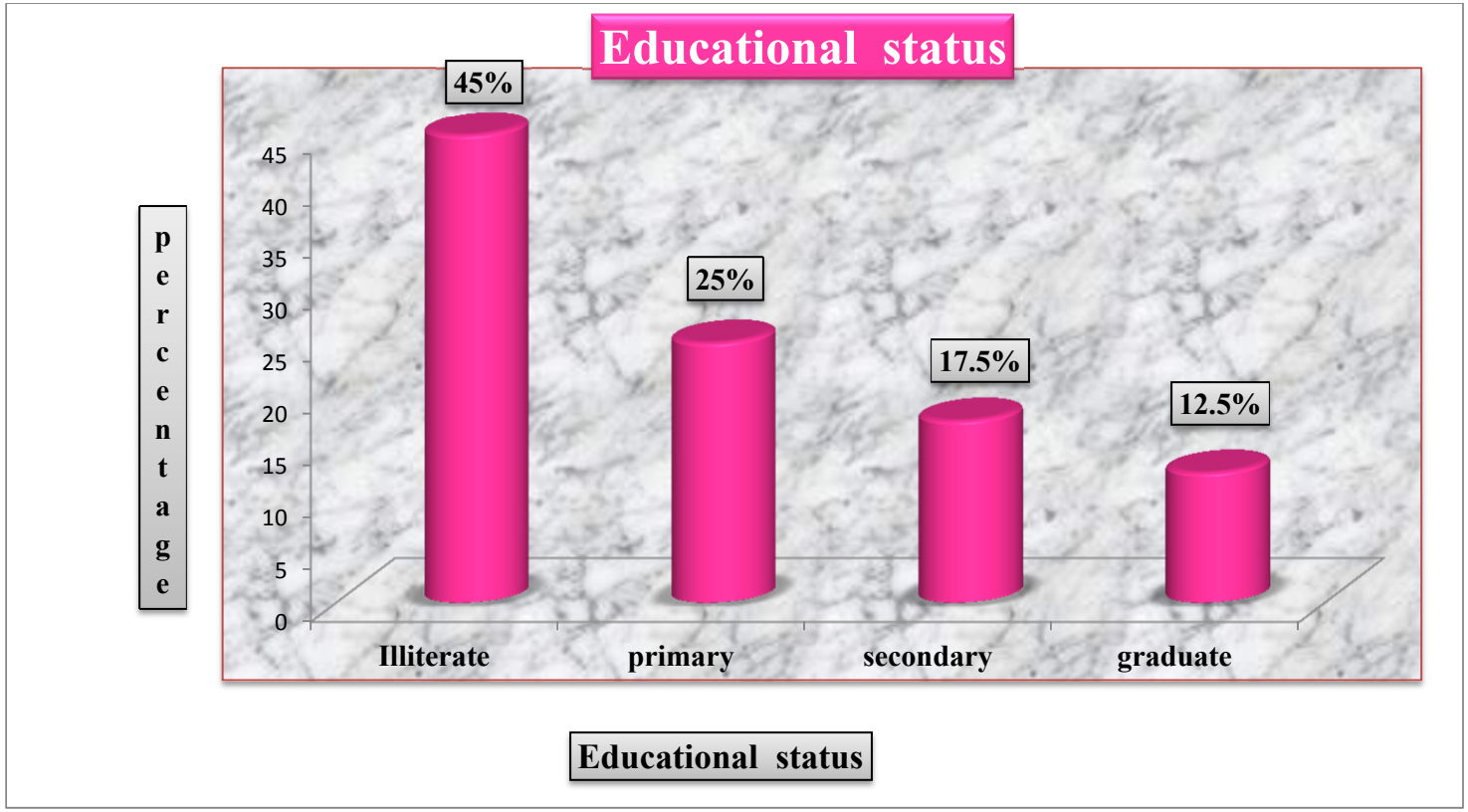


Figure 4.1.4 Distribution of elderly persons according to their educational status.

Table 4.1.5 Distribution of elderly persons according to their no of children.

N=40

S.No	No of children	Number (40)	Percentage (%)
1	Nil	1	2.5
2	1	2	5
3	2	20	50
4	Above2	17	42.5
Total		**40**	**100**

The **table 4.1.5 and figure 4.1.5** represents the frequency of subjects according to their no of children. Among them majority, 20(50%) of elderly persons had 2 children, 17(42.5%) of elderly persons had above 2 children, 2(5%) of elderly persons having only one children and 1(2.5%) of elderly persons had no children.

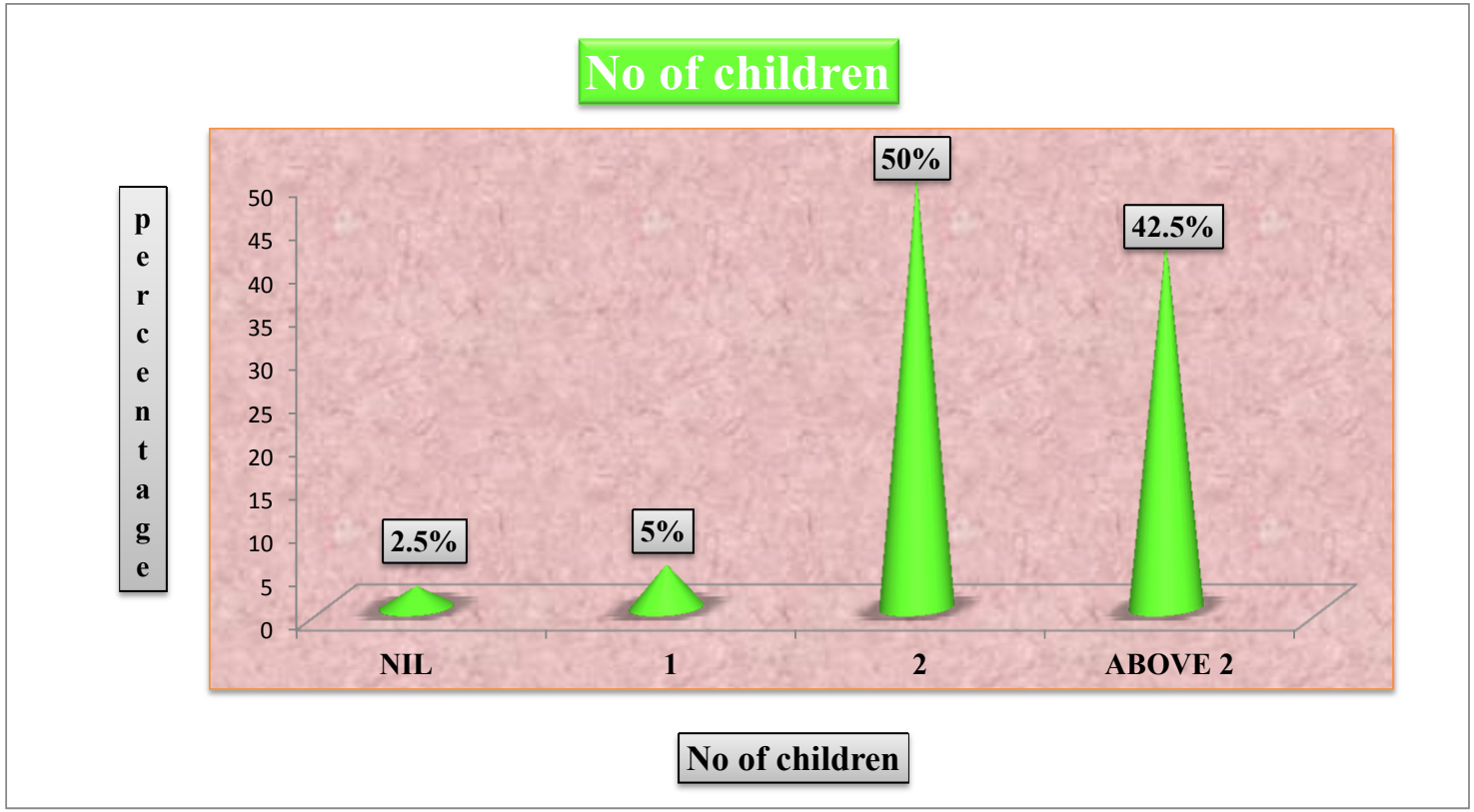


Figure 4.1.5 Distribution of elderly persons according to their no of children.

Table 4.1.6 Distribution of elderly persons according to their family history of depression.

N=40.

S.No	Family history of depression	Number (40)	Percentage(%)
1	Yes	34	85
2	No	6	15
Total		**40**	**100**

The **table 4.1.6 and figure 4.1.6** represents the frequency of subjects according to their family history of depression, among 40 persons, 34(85%) of them had the family history of depression, 6(15%) of them had no family history of depression.

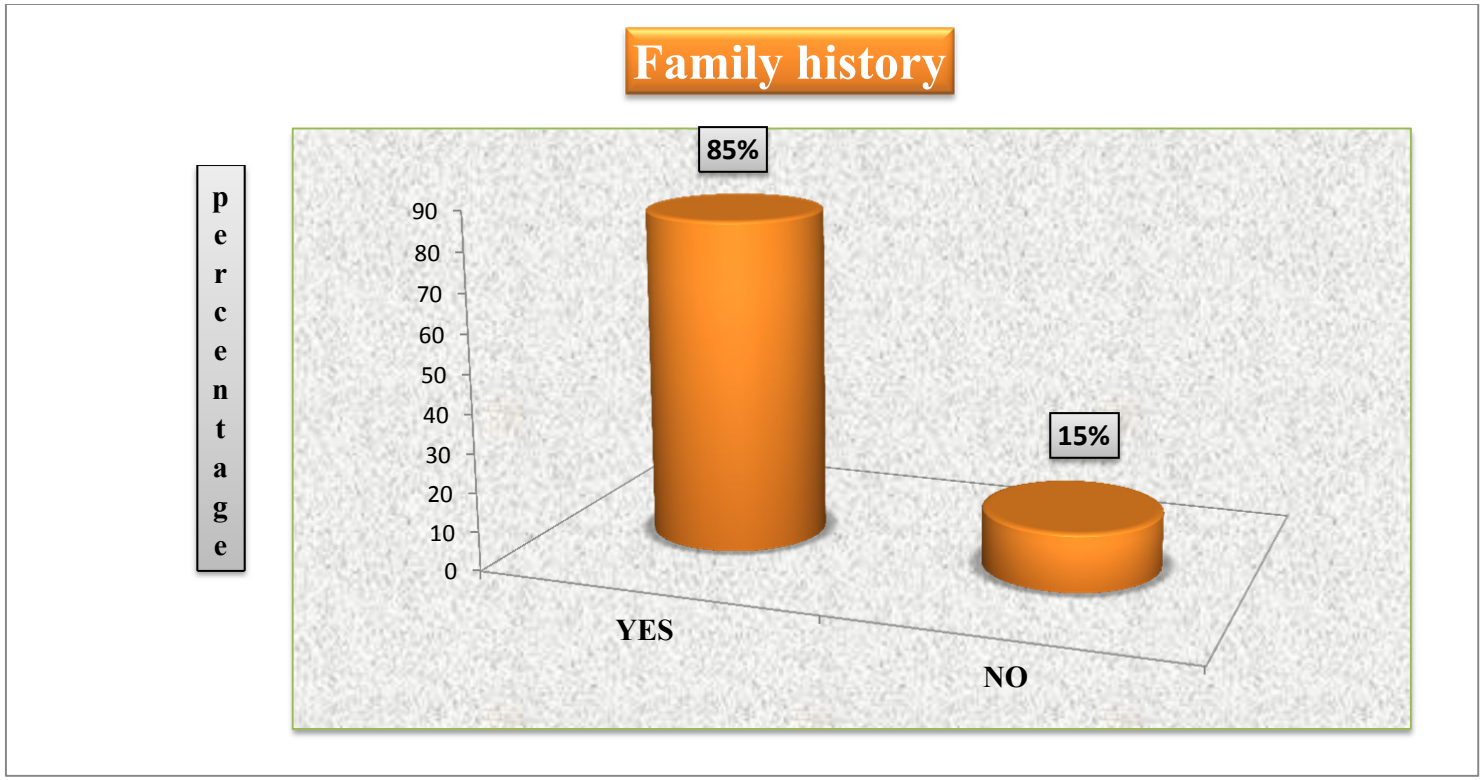


Figure 4.1.6 Distribution of elderly persons according to their family history of depression.

Table 4.1.7 Distribution of elderly persons according to their physical illness.

N=40

S.No	Physical illness	Number (40)	Percentage (%)
1	yes	35	87.5
2	No	5	12.5
Total		**40**	**100**

The **table 4.1.7 and figure 4.1.7** represents the frequency of subjects according to their physical illness. Among them majority, 35(87.5%) of elderly persons had a physical illness, 5(12.5%) of elderly persons had no physical illness.

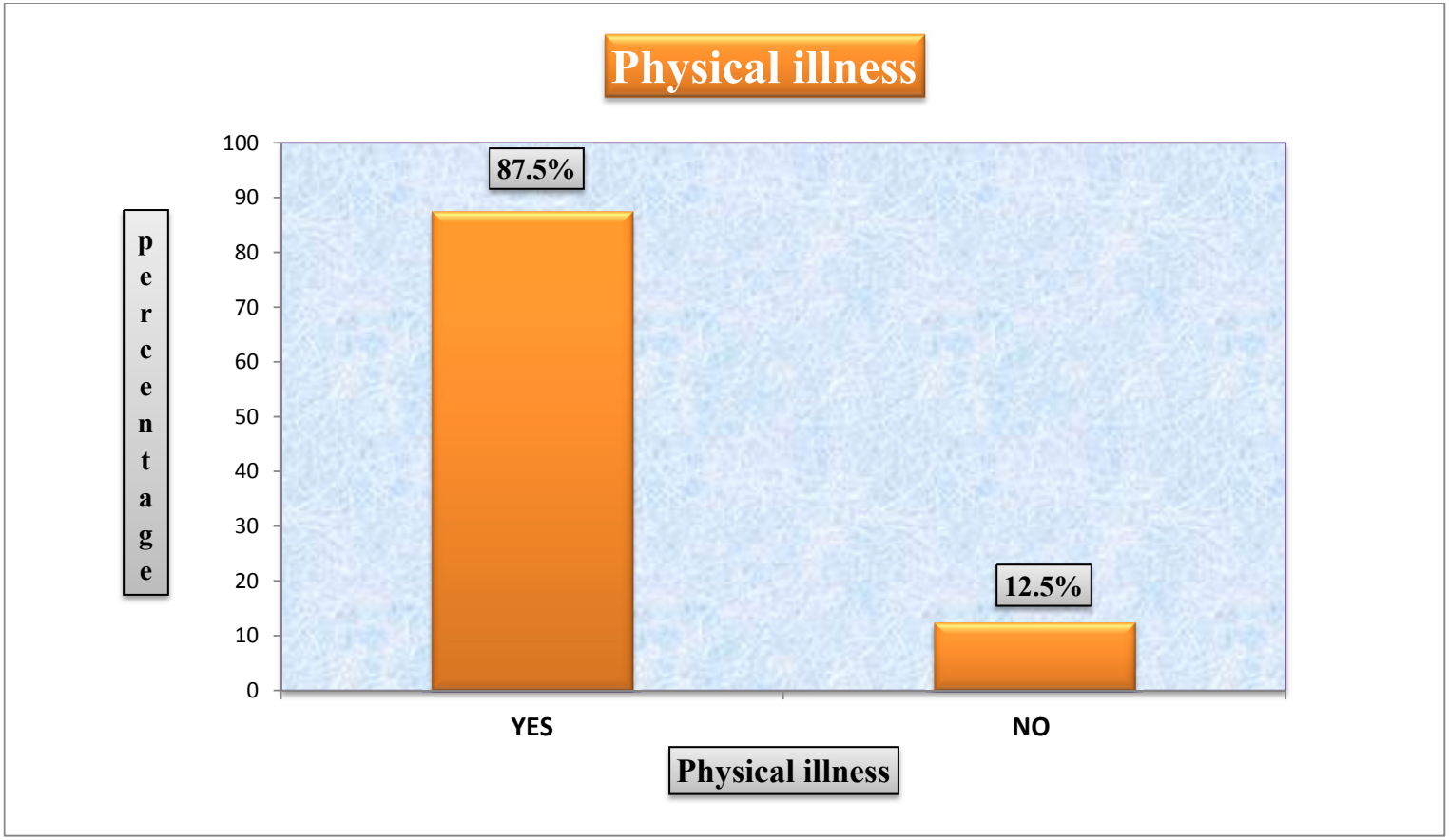


Figure 4.1.7 Distribution of elderly persons according to their physical illness.

Table 4.1.8 Distribution of elderly persons according to their length of stay in old age home.

N=40.

S.No	Length of stay in old age home	Number(40)	Percentage(%)
1	Below 1 year	19	47.5
2	1-5 years	16	40
3	Above 5years	5	12.5
Total		**40**	**100**

The **table 4.1.8 and figure 4.1.8** represents the frequency of subjects according to their length of stay in old age home. Among them majority, 19(47.5%) of elderly persons were staying in old age home below 1year , 16(40%) of elderly persons were staying in old age home for 1-5years, 5(12.5%) of elderly persons were staying in old age home for above 5years.

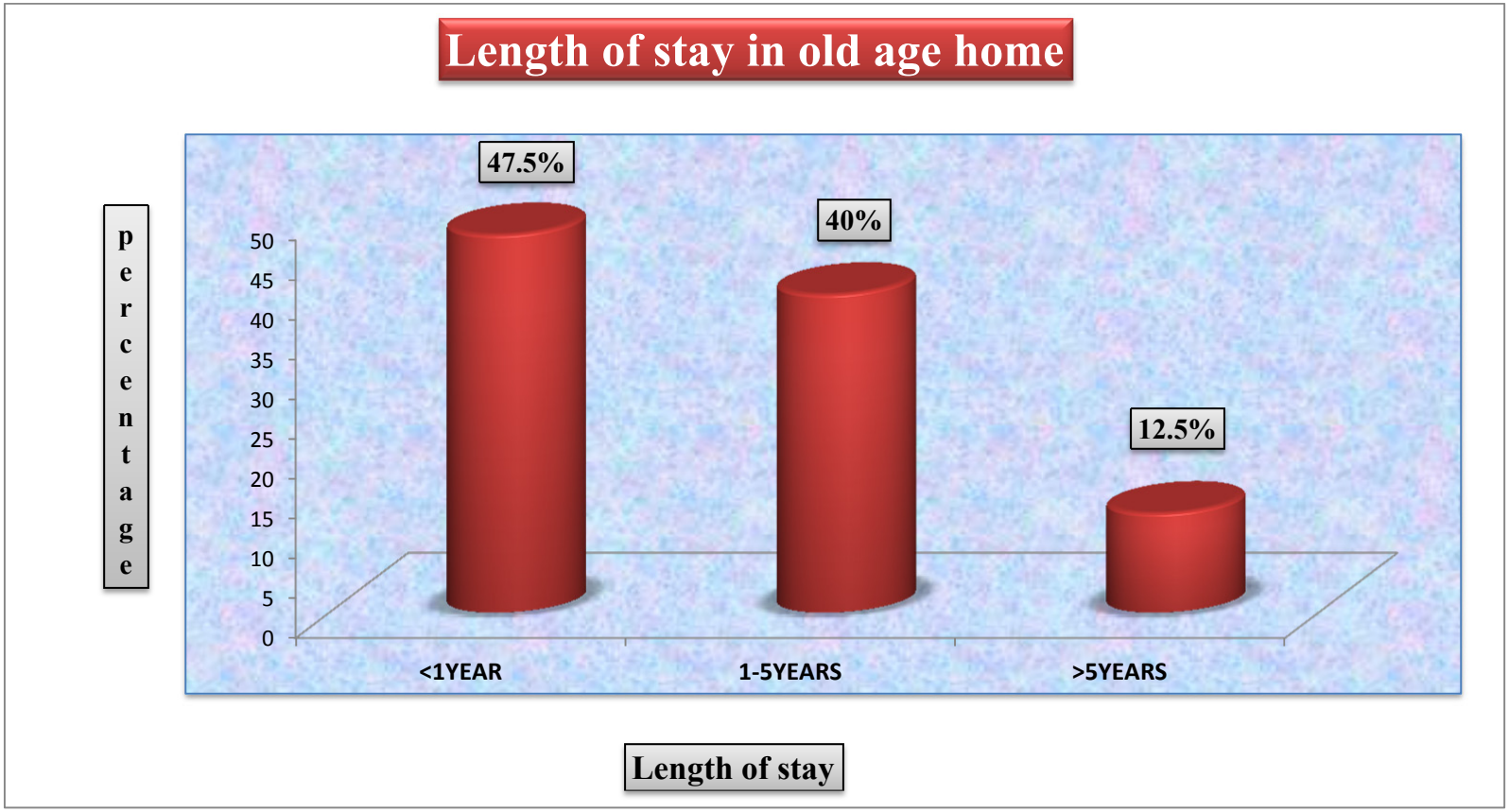


Figure 4.1.8 Distribution of elderly persons according to their length of stay in old age home.

SECTION-II

Assessment of level of depression before and after administration of laughter therapy.

Table 4.2.1 pretest level of depression among elderly persons before administration of laughter therapy.

N=40.

Level of depression	Respondents level	
	No	**%**
Normal level (0-9)	0	0
Mild depression(10-19)	8	20
Severe depression (20-30)	32	80
Total	**40**	**100**

The investigator classified the level of depression into normal (0-9), mild (10-19) and severe (20-30). Table 4.2.1 depicts the pretest level of depression which shows that, none of their having normal level, 8(20%) of respondents were having mild level of depression, 32(80%) of them were having severe level of depression.

Table 4.2.1 and figure 4.2.1 describes the level of depression among elderly persons before administration of laughter therapy. It revealed that, 20% of elderly persons were having mild level of depression, 80% of elderly persons having severe level of depression.

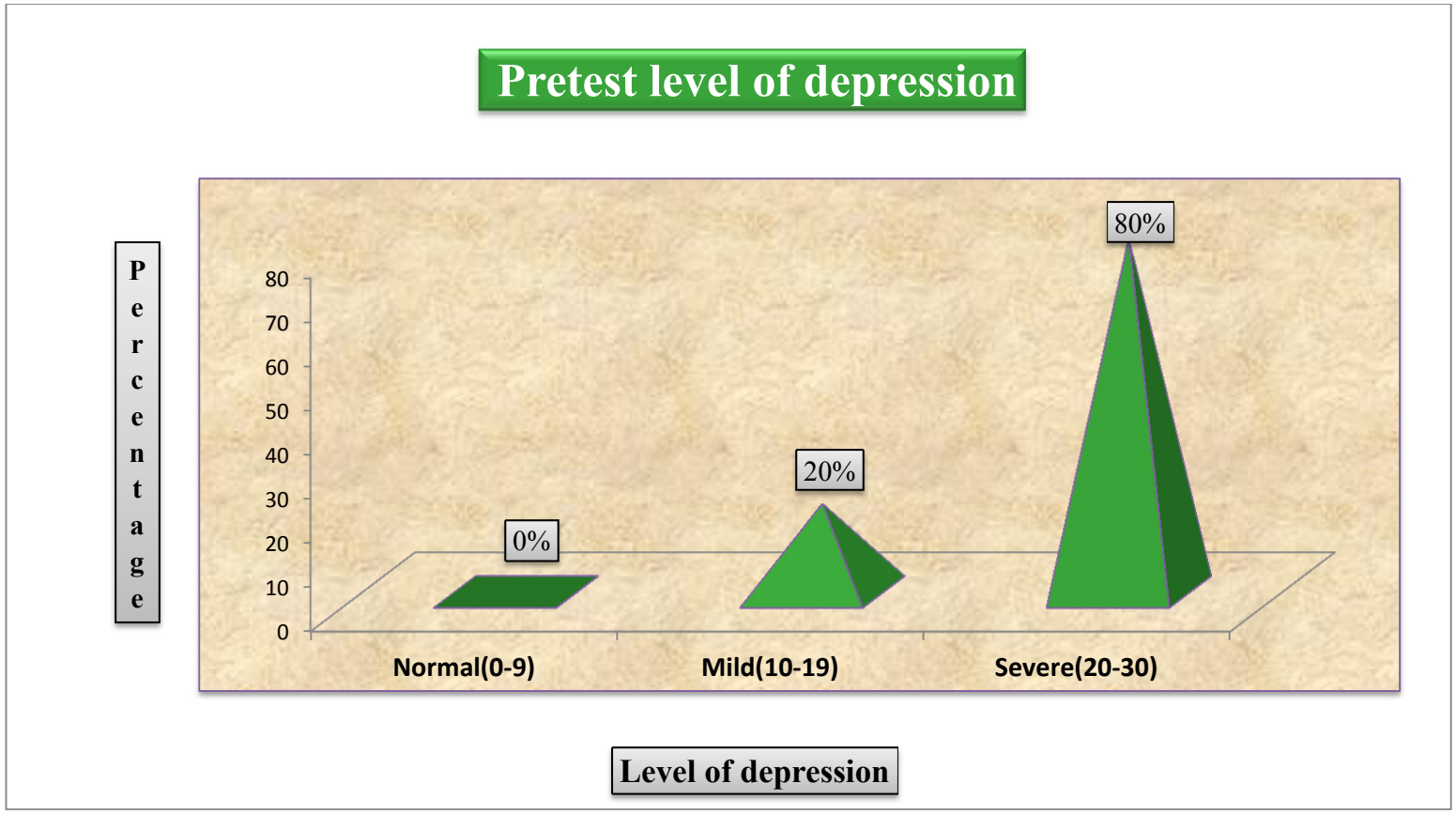


Figure 4.2.1 pretest level of depression among elderly persons before administration of laughter therapy.

Table 4.2.2 overall pretest level of depression among elderly persons before administration of laughter therapy.

N=40

Aspect	Max score	Range score	Respondent level of depression		
			Mean	Mean%	SD
pre-test	30	16-27	22.65	75.5%	3.23

Table 4.2.2 depicts that, mean level of depression among elderly persons before administration of laughter therapy was found to be 22.65 and mean percentage was 75.5 with standard deviation 3.23.

Assessment of level of depression after administration of laughter therapy.

Table 4.2.3 Level of depression among elderly persons after administration of laughter therapy.

N=40

Level of depression	**Respondents level**	
	No	**%**
Normal level (0-9)	10	25
Mild depression (10-19)	30	75
Severe depression (20-30)	0	0
Total	**40**	**100**

Table 4.2.3 and figure 4.2.3 depicts that out of 40 samples 10(25%) of respondents had normal level, 30(75%) of them had mild level of depression after administration of laughter therapy.

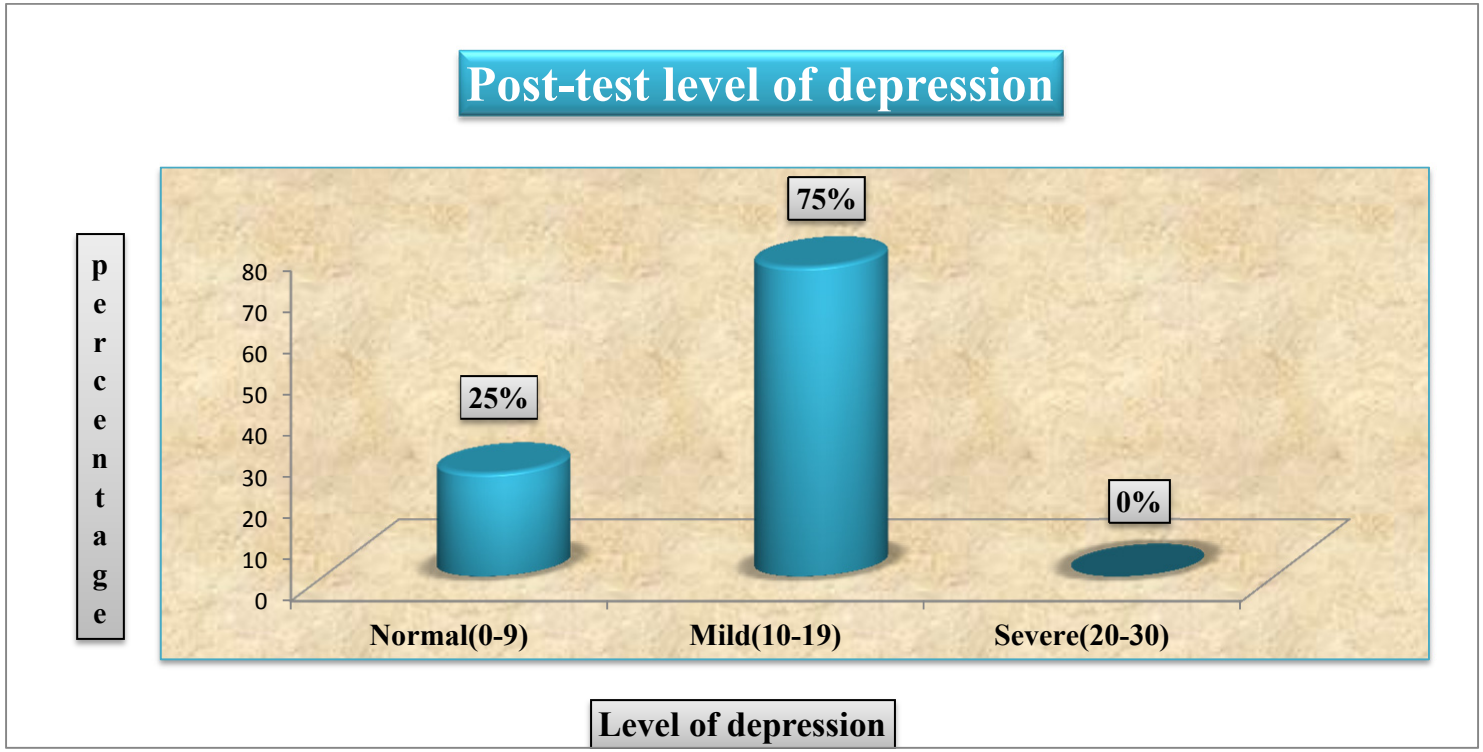


Figure 4.2.3 Level of depression among elderly persons after administration of laughter therapy.

Table 4.2.4 Over all post-test Level of depression among elderly persons after administration of laughter therapy.

N=40

Aspect	Max score	Range score	Respondent level of depression		
			Mean	Mean%	SD
Post-test	30	4-16	8.62	28.73%	3.93

Table 4.2.4 depicted that, the overall post-test level of depression score after administration if laughter therapy. The overall mean level of depression score was 8.62, mean percentage was 28.73% and standard deviation was 3.93.

SECTION-III

Comparison of level of depression before and after administration of laughter therapy among elderly persons

Table 4.3.1 pretest and post-test level of depression among elderly persons

Aspects	Respondent's level of depression			
	Pretest		Post-test	
	No	%	No	%
Normal level (0-9)	0	0	10	25
Mild depression(10-19)	8	20	30	75
Severe depression (20-30)	32	80	0	0
Total	**40**	**100**	**40**	**100**

The comparison of the values of pretest and post-test level of depression depicted in the **table 4.3.1 and figure 4.3.1** shows that none of them had normal level of depression in pretest and after administration of laughter therapy 10(25%) of them had normal level of depression, 8(20%) of them had mild level of depression in pretest and 30(75%) in the post-test, and 32(80%) of them had severe level of depression in pretest and none of them had severe depression after administration of laughter therapy.

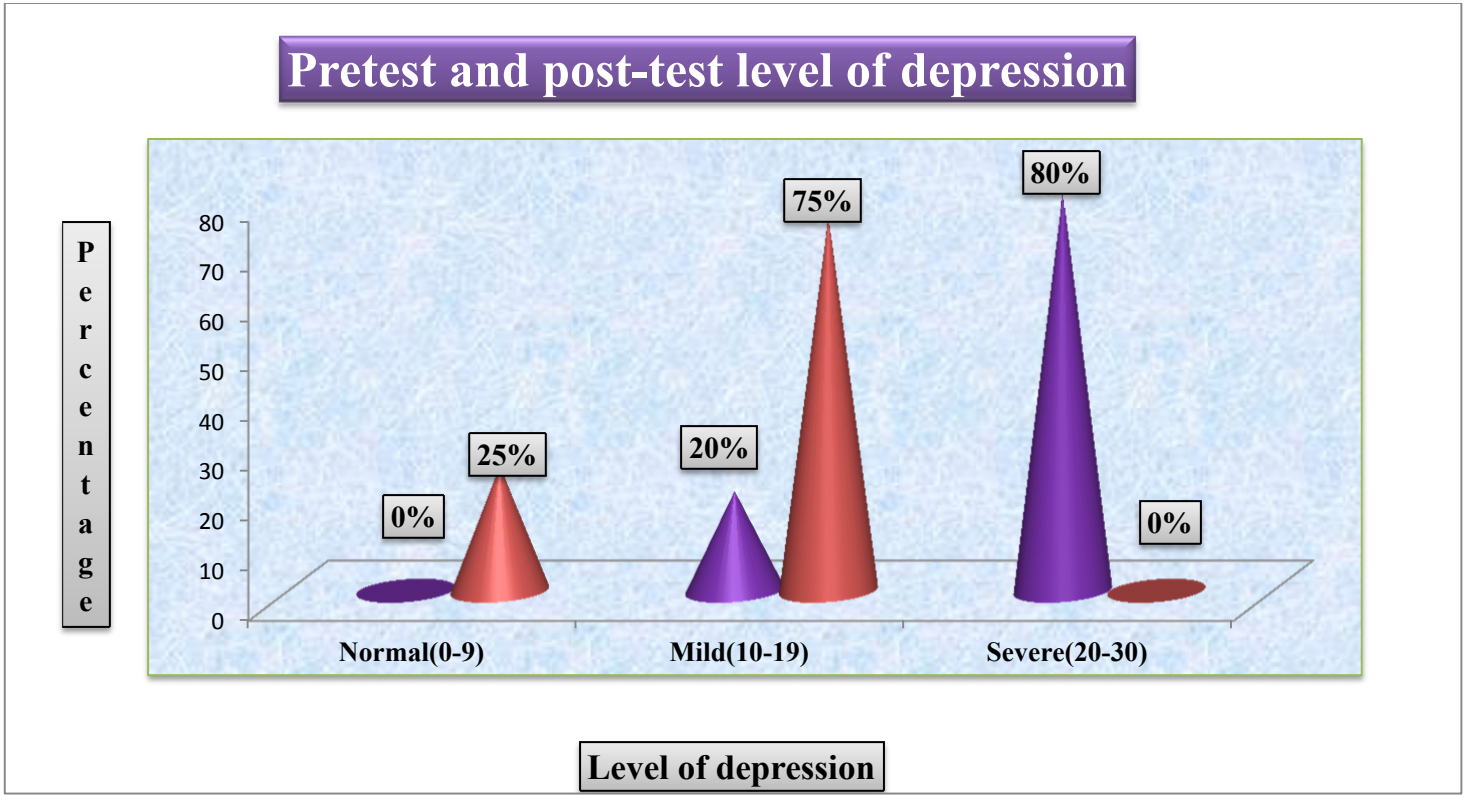


Figure 4.3.1. Comparison of pretest and post-test level of depression among elderly persons.

SECTION-IV

Table 4.4.1 Effectiveness of laughter therapy on depression among elderly persons.

N=40

Aspects	Max score	Range score	Respondent's level of depression			Paired t' test
			Mean	Mean %	SD	
Pre-test	30	16-27	22.65	75.5	3.23	.53*
Post-test	30	4-16	8.62	28.73	3.93	

Table and figure 4.4.1 shows the mean score of depression in pretest and post-test. Post-test mean score was found to be 28.73% and SD 3.93. Moreover the pre-test mean score was 75.5% and SD 3.23. The statistical paired 't' test value is 17.53. Therefore there exists a statistically significant in the enhancement scores indicate the impact of effectiveness of laughter therapy on depression among elderly persons staying in selected old age home at Dindigul district.

SECTION-V

Association between the level of depression among elderly persons with socio-demographic variables.

Table 4.5.1 Association between pretest level of depression scores and demographic variables of elderly persons.

N=40

S.No	Variables	Category	Level of depression						Chi-square value
			Normal		Mild		Severe		
			No	%	No	%	No	%	
1	Age	60-64years 65-69years 70-75years	0 0 0	0 0 0	2 5 1	5 12.5 2.5	1 3 28	2.5 7.5 70	18.05* df=2 t=5.99
2	Sex	male female	0 0	0 0	5 3	12.5 7.5	1 31	2.5 77.5	17.68* df=1 t=3.84
3	Marital status	Unmarried/ Divorced Married Widow/ Widowers	0 0 0	0 0 0	2 5 1	5 12.5 2.5	0 4 28	0 10 70	20.06* df=2 t=5.99
4	Educational status	Illiterate Primary Higher secondary Graduate	0 0 0 0	0 0 0 0	2 2 3 1	5 5 7.5 2.5	16 8 4 4	40 20 10 10	3.15 df=3 t=7.82
5	No of children	Nil 1 2 Above 2	0 0 0 0	0 0 0 0	0 0 5 3	0 0 12.5 7.5	1 2 15 14	2.5 5 37.5 35	1.11 df=3 t=7.82
6	Family history	Yes No	0 0	0 0	4 4	10 10	30 2	75 5	9.59* df=1 t=3.84
7.	Physical illness	yes No	0 0	0 0	4 4	10 10	31 1	77.5 2.5	12.85* df=1 T=3.84
8.	Length of stay in old age home	Below 1yr 1-5yrs Above 5yrs	0 0 0	0 0 0	6 1 1	15 2.5 2.5	13 15 4	32.5 37.5 10	3.46 df=2 t=5.99

Table 4.5.1. presents substantive summary of chi-square analysis it was used to bring out the relationship between the pretest level of depression and the selected socio demographic variables such as age, sex, marital status, educational status, no of children, family history, physical illness and length of stay in old age home.

The variables such as age, sex, marital status, family history of depression and physical illness are significant.

❖ The elderly persons who were in the age group of 60-64years 2(5%) had mild depression and 1(2.5%) had severe level of depression. Elderly persons who were in the age group of 65-69years 5(12.5%) had mild depression and 3(7.5%) had severe level of depression. Elderly persons who were in the age group of 70-75years 1(2.5%) had mild depression and 28(70%) had severe level of depression. The chi-square value for association between age and pretest level of depression was 18.05, which was significant chi-square (P=0.05, 2df= 5.99). It inferred that there was significant association between age and pre-test level of depression.

❖ The elderly persons who were males 5(12.5%) had mild depression and 1(2.5%) had severe level of depression. Females 3(7.5%) had mild depression and 31(77.5%) had severe level of depression. The chi-square value for association between sex and pretest level of depression was 17.68, which was significant chi-square (P=0.05, 1df= 3.84). It inferred that there was significant association between sex and pre-test level of depression.

❖ The elderly persons who were unmarried/divorced 2(5%) had mild depression and none of them had severe level of depression. Elderly persons who were married 5(12.5%) had mild depression and 4(10%) had severe level of depression. Elderly persons who were widow/widowers 1(2.5%) had mild depression and 28(70%) had severe level of depression. The chi-square value for association between marital status and pretest level of depression was 20.06, which was significant chi-square (P=0.05, 2df= 5.99). It inferred that there was significant association between marital status and pre-test level of depression.

❖ The elderly persons who were presence of family history of depression 4(10%) had mild depression and 30(75%) had severe depression. Elderly persons who were not having family history of depression 4(10%)had mild depression and 2(5%) had severe level of depression. The chi-square value for association between family history of depression and pretest level of depression was 9.59, which was significant chi-square (P=0.05, 1df= 3.84). It inferred that there was significant association between family history of depression and pretest level of depression.

❖ The elderly persons who were presence of physical illness 4(10%) had mild depression and 31(77.5%) had severe depression. Elderly persons who were not having physical illness 4(10%) had mild depression and 1(2.5%) had severe level of depression. The chi-square value for association between presence of physical illness and pretest level of depression was 12.85, which was significant chi-square (P=0.05, 1df= 3.84). It inferred that there was significant association between physical illness and pretest level of depression.

Other socio demographic variables such as educational status, no of children, and length of stay in old age home were not significantly associated with level of depression.

Hypothesis testing:

In order to evaluate the effectiveness of laughter therapy on depression among elderly persons three research hypothesis were formulated.

Research hypothesis:

H1: There will be significant difference between pretest and post test level of depression among elderly persons staying in selected old age home at Dindigul.

In order to find the significance of mean score difference of pretest and post-test level of depression scores, 't' value was calculated and presented in the **table 4.4.2 and figure 4.4.2** which indicated that there was a significant decrease in the level of depression scores from the pretest to post-test level of depression. Hence research hypothesis (H_1) was accepted.

H2: There will be significant association between pretest level of depression scores with their selected demographic variables of elderly persons.

Chi-square analysis was used to test the association between the pretest level of depression with socio demographic variables and presented in the **table 4.5.1**. The variables such as age, sex, marital status, physical illness and family history of depression were significantly associated with the pre-test level of depression. Hence, research hypothesis (H_2) was accepted and null hypothesis has been rejected.

Discussion

The primary purpose of this study was to evaluate the effectiveness of laughter therapy among elderly persons staying in selected old age home at Dindigul district and find out the relationship between the selected demographic variables with pretest level of depression scores.

Discussion about,

- Socio demographic variables
- Analysis of effectiveness of laughter therapy
- Relationship between socio demographic variables with pretest level of depression scores.

Findings related to socio demographic variables:

- Among 40 samples, 3(7.5%) of elderly persons were in age group of 60-64 years, 8(20%) of elderly persons were in age group of 65-69 years and 29(72.5%) of elderly persons were in age group of 70-75 years.
- Nearly 34(85%) of elderly persons were females and 6(15%) were males.
- In the study, 2(5%) of elderly persons were unmarried/divorced, 9(22.5%) of elderly persons were got married and 29(72.5%) of elderly persons were widow/widowers.
- Out of 40 samples, 18(45%) of elderly persons were illiterate, 10(25%) of elderly persons had primary school education, 7(17.5%) of elderly persons had higher secondary education and 5(12.5%) of elderly persons were graduate.
- The study reveals that, 1(2.5%) of elderly persons had no children, 2(5%) of elderly persons had only one children, 20(50%) of elderly persons had 2 children and 17(42.5%) of elderly persons having above 2 children.
- Among 40 elderly persons, 34(85%) of them had the family history of depression, 6(15%) of them had no family history of depression.
- In the present study, 35(87.5%) of elderly persons had a physical illness, 5(12.5%) of elderly persons had no physical illness.
- The study reveals that, 19(47.5%) of elderly persons were staying in old age home for below 1year, 16(40%) of elderly persons were staying in old age

home for 1-5years, 5(12.5%) of elderly persons were staying in old age home for above 5years.

Depression level of elderly persons:

- Before administration of laughter therapy, none of the elderly persons had normal level of depression, 8(20%) of elderly persons had mild level of depression, 32(80%) of them had severe level of depression.
- After administration of laughter therapy, 10(25%) of elderly persons had normal level, 30(75%) of them had mild level of depression and none of them had severe level of depression.

Analysis of effectiveness of laughter therapy:

The findings shows that none of the elderly persons had normal level of depression in pretest and 10(25%) of them had normal level of depression after administration of laughter therapy, 8(20%) of them had mild level of depression in pretest and 30(75%) in the post-test, and 32(80%) of them had severe level of depression in pretest but none of them had severe depression after administration of laughter therapy.

The pretest mean score percentage 75.5% of level of depression among elderly persons which is reduced to 28.73% in post-test. It confirmed that there was a decreased the level of depression among elderly persons after administration of laughter therapy. The paired‘t’ test analysis of the pretest and post-test level of depression t=17.53 (P=0.05, df=1.96) was highly significant. The result evidently supported the effectiveness of laughter therapy on depression among elderly persons staying in selected old age home at Dindigul district.

Relationship between socio demographic variables and pretest level of depression:

The present study revealed that, there was an association between the pretest level of depression to age, sex, marital status, family history of depression and physical illness of elderly persons. But, there was no association between the level of depression and other socio demographic variables such as educational status, no of children and length of stay in old age home.

Summary:

This chapter dealt with analysis and interpretation of the data collected from elderly person's level of depression before and after administration of laughter therapy. It also dealt with discussion of results.

SUMMARY FINDINGS, CONCLUSION, RECOMMENDATIONS, & IMPLICATIONS

CHAPTER-V

SUMMARY, FINDINGS, CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS.

This chapter deals with summary of the study, its findings and conclusion, implication of laughter therapy for decreasing the level of depression among elderly persons staying in selected old age home at Dindigul district. Explanation with regard to objectives and findings presented briefly followed by recommendation.

Summary of the study:

The primary aim of the study was to evaluate the effectiveness of laughter therapy on depression among elderly persons staying in selected old age home at Dindigul district.

The objectives of the study were,

- To compare the level of depression before and after administration of laughter therapy among elderly persons staying in selected old age home.
- To evaluate the effectiveness of laughter therapy among elderly persons staying in selected old age home.
- To find out the association between the pre test level of depression among elderly persons with their selected socio demographic variables.
- To find out the association between the post test level of depression among elderly persons with their selected socio demographic variables.

The study attempted to examine the following research hypothesis:

H1: There will be significant difference between pretest and post test level of depression among elderly persons staying in selected old age home.

H2: There will be significant association between pretest level of depression scores with their selected demographic variables.

The conceptual frame work adopted for the study was based on Roy's Adaptation Model; which addresses the implementation of existing research knowledge. The general system model includes input, process and output.

The review of literature helped the investigator to develop conceptual frame work, determine the methodology for the study and plan for analysis of the data in the most effective and efficient way.

The research approach adopted for the study was quasi-experimental one group pretest post-test design.

In the present study the investigator test the relationship between independent and dependent variables, the independent variable is laughter therapy and dependent variable is depression.

The investigator developed an instrument for the study which consists of two sections

Section A: Socio demographic data consists of 8 items.

Section B: Geriatric Depression Scale which consist of 30 items dealing with the level of depression among elderly persons.

The content validity of the tool was established on the basis of expert's judgment. The pilot study was conducted during 02.05.2016 to 07.05.2016. The tool was administered to 4 elderly persons in Anbalaya old age home at Dindigul district. The reliability of the tool was r=0.93 established by Karl spearson's formula. The instrument was found to be reliable to conduct the study. The purpose of the study were,

- To find out the feasibility of conducting final study
- To determine the method of statistical analysis
- To test the tool.

The final study was conducted during 01.06.2016 to 30.06.2016. Non-probability purposive sampling was used to select the samples. The sample consists of 40 elderly persons. Confidentiality was assured to the subjects. Pretest was conducted to assess the level of depression among elderly persons first day. Then administer laughter therapy was given for a week and then the post-test was conducted to assess the effectiveness of laughter therapy after a week. The data was gathered and analyzed and interpreted in terms of objectives of the study. Descriptive and inferential statistics were used for data analysis.

Major findings of the study

The major findings of the study are summarized as follows,

Findings related to socio demographic variables:

- Nearly above half percent 29(72.5%) of elderly persons were in age group of 70-75 years.
- Majority 34(85%) were females.
- Most of elderly persons 29(72.5%) were widow/widowers.
- About 18(45%) of elderly persons were illiterate.
- Majority 20(50%) of elderly persons had 2 children.
- About 34(85%) of them had the family history of depression.
- Most of elderly persons 35(87.5%) had a physical illness.
- Nearly 19(47.5%) of elderly persons were staying in old age home for below 1year.

Findings related to effectiveness of laughter therapy:

The findings shows that none of the elderly persons had normal level of depression in pretest and 10(25%) of them had normal level of depression after administration of laughter therapy, 8(20%) of them had mild level of depression in pretest and 30(75%) in the post-test, and 32(80%) of them had severe level of depression in pretest but none of them had severe depression after administration of laughter therapy.

- The pretest mean score percentage 75.5% of level of depression among elderly persons which is reduced to 28.73% in post-test. It confirmed that there was a decreased in the level of depression among elderly persons after administration of laughter therapy.
- The paired‘t’ test analysis of the pretest and post-test level of depression t=17.53 (P=0.05, df=1.96) was highly significant. The result evidently supported the effectiveness of laughter therapy on depression among elderly persons staying in selected old age home at Dindigul district.

Findings related to relationship between socio demographic variables and pretest level of depression score:

The present study revealed that, there was an association between the pretest level of depression to age, sex, marital status, family history of depression and physical

illness of elderly persons. But, there was no association between the level of depression and other socio demographic variables such as educational status, no of children and length of stay in old age home.

Conclusion:

The following conclusions are drawn from the findings of the study. Before administration of laughter therapy no elderly persons had normal level of depression. After administration of laughter therapy, the level of depression was decreased among elderly persons. Thus, the study strongly suggests that there is an effectiveness of laughter therapy on depression among elderly persons staying in selected old age home at Dindigul district.

Implication of the study

The findings of the study have implications in various areas of nursing profession i.e., nursing practice, nursing education, nursing administration and nursing research.

Nursing practice:

- The nursing practice is concentrating on preventive aspects then the curative aspects.
- The study highlights the positive effect of non pharmacological intervention for reducing depression.
- The psychiatric nurse periodically administer laughter therapy for create awareness in preventing depression on elderly persons.
- Nurses can play vital role in reducing depression by using complimentary therapies.

Nursing education:

- The clinical instructors can use research findings in clinical teaching.
- Nurse educators can teach laughter therapy as a technique to reduce depression.
- Mass health education programmes may be conducted regarding laughter therapy in the outpatient department and community.

- ❖ The nursing students are equipped with up to date knowledge about laughter therapy to reduce psychiatric disorders.

Nursing administration:

- ❖ The nurse administrator can conduct a workshop and possibly make a students and nursing staff to participate in awareness.
- ❖ The nurse should prepare case presentation, clinical presentation, nursing rounds, clinical demonstration in the importance of laughter therapy on depression among elderly persons.
- ❖ Conducting in-service education and training programme for practicing nurses to create awareness in preventing depression in elderly persons.

Nursing research:

- ❖ Nurse researchers should be motivated to conduct more studies on prevention of depression among various age group.
- ❖ Nurse researchers can be conducted in a large sample.

Recommendation

- ➢ A similar study can be conducted with control group
- ➢ A similar study can be conducted by involving students to reduce the level of depression.
- ➢ A similar study can be conducted in a geriatric outpatient set up.
- ➢ This study can be carried out on the mental disorderly patients in the community set up.
- ➢ The study can be carried out among adults in the hospital set up.
- ➢ A similar study can be conducted for long duration of intervention.
- ➢ A study can be replicated on large population; thereby findings can be generalizable to large population.

Summary:

This chapter had dealt with the summary, major findings of the study, conclusion, implications and recommendations which guides the researcher to understand in depth about the reasons for elderly persons developing depression and providing means to rectify them.

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APPENDICES

APPENDIX A

LETTER SEEKING EXPERTS OPINION FOR CONTENT VALIDITY

From,

Mr. A. JAYA RAJ**,**
II year M.Sc Nursing,
Jainee College of Nursing,
Dindigul.

To,

Dr. Deen Westly,MBBS.MD

Consultant Psychiatrist,

Govt. Head Quarters Hospital,

Dindigul.

Respected Sir,

Sub: Requisition for content validity tool

I Mr. A. JAYA RAJ**,** II year M.Sc Nursing (Mental Health Nursing), Jainee College of Nursing, Dindigul have undertaken a thesis on the topic "**A study to evaluate the effectiveness of laughter therapy on depression among elderly persons staying in selected old age home, at Dindigul district, Tamilnadu"** as a part of the academic requirement.

A tool has been developed for the research study. I am sending the above stated for your expert and valuable opinion. I will be thank ful for your kind consideration. Kindly return it to the undersigned.

Thanking you.

Place: **Your's sincerely,**

Date: Mr. A. JAYA RAJ

APPENDIX-B

LETTER GRANTING PERMISSION TO CONDUCT THE STUDY

From,

Anbalaya, old age home
Dindigul district.

To,

Mr. A. JAYA RAJ**,**
II year M.Sc Nursing,
Jainee College of Nursing,
Dindigul.

SUB: Letter granting permission to conduct the study.

With reference to the above letter, it has been informed that, Mr. A. JAYA RAJ**,** II year M.Sc Nursing student (Mental Health Nursing), Jainee College of Nursing, Dindigul., is allowed to conduct the study on the above stated topic in our old age home. Also he has been informed that she will not disturb the regular and routine works of the old age home.

With thanks.

Place:

Date:

Anbalaya, old age home, Dindigul district.

APPENDIX-C

LETTER SEEKING CONSENT FROM THE PARTICIPANTS.

Dear participants,

I **Mr. A. JAYA RAJ**, II year M.Sc Nursing (Mental health nursing), Jainee College of Nursing, Dindigul, have undertaken a thesis on the topic **"A study to evaluate the effectiveness of laughter therapy on depression among elderly persons staying in selected old age home, at Dindigul district, Tamilnadu"**. The information which you are giving will be kept confidential and will be used only for this study. Please participate in this programme by answering my questions honestly and state your willingness to participate in this study.

Thanking you.

Place: Your's Sincerely,

Date: Mr. A. JAYA RAJ.

CONSENT FROM THE PARTICIPANTS

I understand the purpose of this study and I am willing to participate in this study.

signature

APPENDIX- D

LETTER SEEKING THE EXPERTS OPINION OF THE TOOL

From,

Mr. A. JAYA RAJ**,**
II year M.Sc Nursing,
Jainee College of Nursing,
Dindigul

Through

The principal
Jainee College of Nursing,
Dindigul

Subject: Request for content validation of the tool.

Respected sir/ madam,

I Mr. A. JAYA RAJ**,** II year M.SC Nursing (Mental health nursing), Jainee College of Nursing, Dindigul have undertaken a thesis on the topic **"A study to evaluate the effectiveness of laughter therapy on depression among elderly persons staying in selected old age home, at Dindigul district, Tamilnadu"**, to be submitted to The Tamilnadu Dr.M.G.R Medical University as a partial requirement for master degree of nursing.

I humbly request you to give me your valuable suggestions regarding the appropriateness of the tool, which I have enclosed. Kindly give your valuable comments on the tool.

I also request you to kindly sign the certificate stating that you have validated the tool, your kind cooperation and your expert judgement will be very much appreciated.

Thanking you.

Place: Your's faithfully,

Date: Mr. A. JAYA RAJ.

Enclosures:

1. Semi structured questionnaires,
2. Score key
3. Evaluation check list
4. Certificate of validation

SEMI- STRUCTURED INTERVIEW SCHEDULE

APPENDIX-E

CERTIFICATE OF ENGLISH EDITING

TO WHOM SO EVER IT MAY CONCERN

This is to that the dissertation work **"A study to evaluate the effectiveness of laughter therapy on depression among elderly persons staying in selected old age home, at Dindigul district, Tamilnadu",** done by **Mr.A.Jayaraj**, II year M.Sc Nursing, Jainee College of Nursing, Dindigul is edited for English Language appropriateness by Mr.Manimozhiselvan.

Signature

APPENDIX-F

SECTION –A

SOCIO DEMOGRAPHIC DATA

1.Age

1.1. 60- 64 years

1.2. 65 – 69 years

1.3. 70 -75 years

2. Sex

2.1. Male

2.2. Female

3. Marital status

3.1. Married/ Divorced

3.2. Unmarried

3.3. Widow/ Widowers

4. Educational status

4.1. Illiterate

4.2. Primary school

4.3. High school

4.4. Graduate

5. Number of children

5.1. Nil

5.2. 1 Child

5.3. 2 Child

5.4. More than 2

6.A. Do you have any family history of Depression?

6.1. Yes

6.2. No

6.B. If yes, specify the relationship?

6.1. father

6.2. Mother

6.3. Siblings

7. A. Do you have any physical illness

7.1. Yes

7.2. No

7.B. If Yes, specify the illness?

7.1. Diabetes Mellitus

7.2. Hypertension

7.3. Heart disease

7.4. Others

8. Length of stay in old age home

8.1. Below 3 years

8.2. 3 to 5 years

8.3. Above 5 years

SECTION - B

GERIATRIC DEPRESSION SCALE

Instructions: choose the best answer for how you felt over the past week

No	Question	Answer	Score
1.	Are you basically satisfied with your life?	Yes / No	
2.	Have you dropped many of your activities and interests?	Yes / No	
3.	Do you feel that your life is empty?	Yes / No	
4.	Do you often get bored?	Yes / No	
5.	Are you hopeful about the future?	Yes / No	
6.	Are you bothered by thoughts you can't get out of your head?	Yes / No	
7.	Are you in good spirits most of the time?	Yes / No	
8.	Are you afraid that something bad is going to happen to you?	Yes / No	
9.	Do you feel happy most of the time?	Yes / No	
10.	Do you often feel helpless?	Yes / No	
11.	Do you often get restless and fidgety?	Yes / No	
12.	Do you prefer to stay at home, rather than going out and doing new things?	Yes / No	
13.	Do you frequently worry about the future?	Yes / No	
14.	Do you feel you have more problems with memory than most?	Yes / No	
15.	Do you think it is wonderful to be alive now?	Yes / No	
16.	Do you often feel downhearted and blue?	Yes / No	
17.	Do you feel pretty worthless the way you are now?	Yes / No	
18.	Do you worry a lot about the past?	Yes / No	
19.	Do you find life very exciting?	Yes / No	
20.	Is it hard for you to get started on new projects?	Yes / No	
21.	Do you feel full of energy?	Yes / No	
22.	Do you feel that your situation is hopeless?	Yes / No	
23.	Do you think that most people are better off than you are?	Yes / No	
24.	Do you frequently get upset over little things?	Yes / No	
25.	Do you frequently feel like crying?	Yes / No	
26.	Do you have trouble concentrating?	Yes / No	
27.	Do you enjoy getting up in the morning?	Yes / No	
28.	Do you prefer to avoid social gatherings?	Yes / No	
29.	Is it easy for you to make decisions?	Yes / No	
30.	Is your mind as clear as it used to be?	Yes / No	

KEY:

This is the original scoring for the scale: one point for each of these answers.

1. YES	11. YES	21. NO
2. YES	12. YES	22. YES
3. YES	13. YES	23. YES
4. YES	14. YES	24. YES
5. NO	15. NO	25. YES
6. YES	16. YES	26. YES
7. NO	17. YES	27. NO
8. YES	18. YES	28. YES
9. NO	19. NO	29. NO
10. YES	20. YES	30. NO.

SCORING PROCEDURE:

SCORE	LEVEL OF DEPRESSION
O-9	Normal
10-19	Mild depression
20-30	Severe depression

TAMIL TRANSLATION OF THE TOOL

நேர் காணல்

பகுதி-அ

சமுதாயச் சூழ்நிலை மற்றும் மருத்துவக் காரணிகள்

1. வயது

1.1) 60 வயது முதல் 64 வயது வரை

1.2) 65 வயது முதல் 69 வயது வரை

1.3) 70 வயது முதல் 75 வயது வரை

2. பாலினம்

2.1) ஆண்

2.2) பெண்

3. திருமணம் பற்றிய விபரம்

3.1) திருமணம் ஆகாதவர்∴ விவாகரத்து ஆனவர்

3.2) திருமணம் ஆனவர்

3.3) கணவர் இழந்தவர்∴ மனைவியை இழந்தவர்.

4. கல்வித் தகுதி

4.1) படிப்பறிவு இல்லாதவர்

4.2) ஆரம்பக்கல்வி வரை

4.3) உயர்க்கல்வி வரை

4.4) பட்டப்படிப்பு படித்தவர்

5. குழந்தைகளின் எண்ணிக்கை

5.1) இல்லை

5.2) 1 குழந்தை

5.3) 2 குழந்தை

5.4) 2 குழந்தைகளுக்கு மேல்

6. அ) உங்கள் குடும்பத்தில் எவருக்கேனும் மனஅழுத்தம் உள்ளதா?

6.1) ஆம்

6.2) இல்லை

6. ஆ) ஆம் எனில், உறவுமுறையை குறிப்பிடுக.

6.1) தாய்

6.2) தந்தை

6.3) உடன்பிறந்தோர்

7. உங்களுக்கு ஏதேனும் உடல் ரீதியான நோய் உள்ளதா?

7.1) ஆம்

7.2) இல்லை

7. ஆ) ஆம் எனில், நோயை குறிப்பிடுக.

7.1) நீரிழிவு நோய்

7.2) இரத்த அழுத்த நோய்

7.3) இருதய நோய்

7.4) இதைத் தவிர

8. முதியோர் இல்லத்தில் தங்கி இருக்கும் காலம்.

8.1) 3 வருடத்திற்கு கீழ்

8.2) 3 முதல் 5 வருடத்திற்குள்

8.3) 5 வருடத்திற்கு மேல்

பகுதி ஆ

முதியோரின் மனஅழுத்த அளவுகோல்

வ. எண்	விபரம்	ஆம்	இல்லை
1	உங்கள் வாழ்க்கை திருப்தியுடன் இருப்பதாக கருதுகிறீர்களா?		
2	உங்களுக்கு எல்லா காரியங்களிலும் முன்பு போல் ஆர்வம் இருக்கிறதா?		
3	உங்கள் வாழ்க்கை முழுமை அடையவில்லை என்று கருதுகிறீர்களா?		
4.	நீங்கள் அவ்வப்போது வெறுமையாக இருப்பதாக உணர்கிறீர்களா?		
5	உங்கள் வருங்கால வாழ்க்கையின் மேல் உங்களுக்கு நம்பிக்கை இருக்கிறதா?		
6	உங்களுக்கு மீண்டும் மீண்டும் துன்புறுத்தும் பழைய நினைவுகள் தோன்றுகிறதா?		
7	நீங்கள் பெரும்பாலும நல்ல உணர்வுடனும், மனதுடனும் இருப்பதாக உணர்கிறீர்களா?		
8	உங்களுக்கு ஏதேனும் தீங்கு நிகழப்போகிறது என்று நினைக்கிறீர்களா?		
9.	நீங்கள் எப்போழுதும் மகிழ்ச்சியாக இருப்பது போல் உணர்கிறீர்களா?		
10.	நீங்கள் உதவியற்றவர் போல் உள்ளதாக நினைக்கிறீர்களா?		
11.	நீங்கள் அடிக்கடி நெருக்கடியான நிலையில் உள்ளதைப் போல் கருதுகிறீர்களா?		
12	நீங்கள் வெளியே செல்வதற்கு மாறுதலாக வீட்டிலேயே இருக்க வேண்டும் என்று நினைக்கிறீர்களா?		

வ. எண்	விபரம்	ஆம்	இல்லை
13	நீங்கள் உங்கள் எதிர் காலத்தைப் பற்றி அடிக்கடி கவலைப்படுவீர்களா?		
14	நீங்கள் மற்ற பிரச்சனைகளை வழட மறதி பிரச்சனை அதிகமாக இருப்பதாக உணர்கிறீர்களா?		
15	உங்களுக்கு உயிர் வாழ வேண்டும் என்று மிகுந்த ஆசை உள்ளதா?		
16	நீங்கள் மன உளைச்சலுடன் இருப்பதாக நினைக்கிறீர்களா?		
17	நீங்கள் இப்பொழுது உங்களை மதிப்பில்லாத மனிதர் போல் கருதுகிறீர்களா?		
18	நீங்கள் உங்கள் கடந்த காலத்தைப் பற்றி மிகவும் வருந்துகிறீர்களா?		
19	நீங்கள் உங்கள் வாழ்க்கை மிகவும் சந்தோ'மாக இருப்பதாக உணர்கிறீர்களா?		
20	உங்களுக்கு புதிய காரியங்கள் புரிவதில் கடினமாக உள்ளதா?		
21	நீங்கள் மிகவும் உற்சாகத்துடன் இருப்பதாக உணர்கிறீர்களா?		
22	நீங்கள் உங்கள் நிலைமை நம்பிக்கையின்றி உள்ளது போல் நினைக்கிறீர்களா?		
23	நீங்கள் மற்றவர்கள் உங்களை விட நலமாக இருப்பதாக உணர்கிறீர்களா?		
24	நீங்கள் அடிக்கடி சிறு பிரச்சனைகளுக்காக மனம் சோர்ந்து போவது உண்டா?		
25	நீங்கள் அடிக்கடி அழுகை வருவது போல் உணர்கிறீர்களா?		
26	நீங்கள் உங்கள் மனதை ஒருநிலைப்படுத்தும் போது கடினமாக இருப்பது போல் உணர்கிறீர்களா?		
27	நீங்கள் அதிகாலை தூக்கதிலிருந்து எழுவதை இன்பமாக நினைக்கிறீர்களா?		
28	நீங்கள் சமூக நிகழ்ச்சிகளில் மற்றோருடன் கலந்திருப்பதை தவிர்க்கிறீர்களா?		
29	உங்களுக்கு வாழ்க்கையில் பல்வேறு நிலைகளில் முடிவெடுத்தல் சுலபமாக இருக்கிறதா?		
30	உங்கள் மனம் தெளிவாக இருப்பது போல் உணர்கிறீர்களா?		

APPENDIX-G

EVALUATION CRITERIA CHECK LIST FOR VALIDATION OF TOOL

Instructions:

The expert is requested to go through the content and give your opinion in the column given in the criteria table. If the tool is not meeting the criteria please give your valuable suggestion in the remarks column:

S.No.	Criteria	Yes	No	Remarks
1.	**Baseline Data** The items on the baseline data cover all aspects necessary for the study.			
2.	Semistructured Interview Schedule on the level of depression among elderly persons regarding laughter therapy ✓ Relevant to the topic ✓ Content organization ✓ Language is simple and easy to understand ✓ Clarity of items used ✓ Any other suggestions			

APPENDIX – H

CERTIFICATE OF VALIDATION

This is to certify that

Tool: Semi structured interview schedule consists of two section which includes.

Section A: Socio demographic variables of elderly persons

Section B: Geriartic Depression Scale to assess the level of depression

Prepared by **Mr. A.Jayaraj,** II Year, M.Sc., Nursing student (Mental health Nursing Jainee College of Nursing, Dindigul to be used in her study titled **"A study to evaluate the effectiveness of laughter therapy on depression among elderly persons staying in selected old age home, at Dindigul district, Tamilnadu".** Has been validated by me.

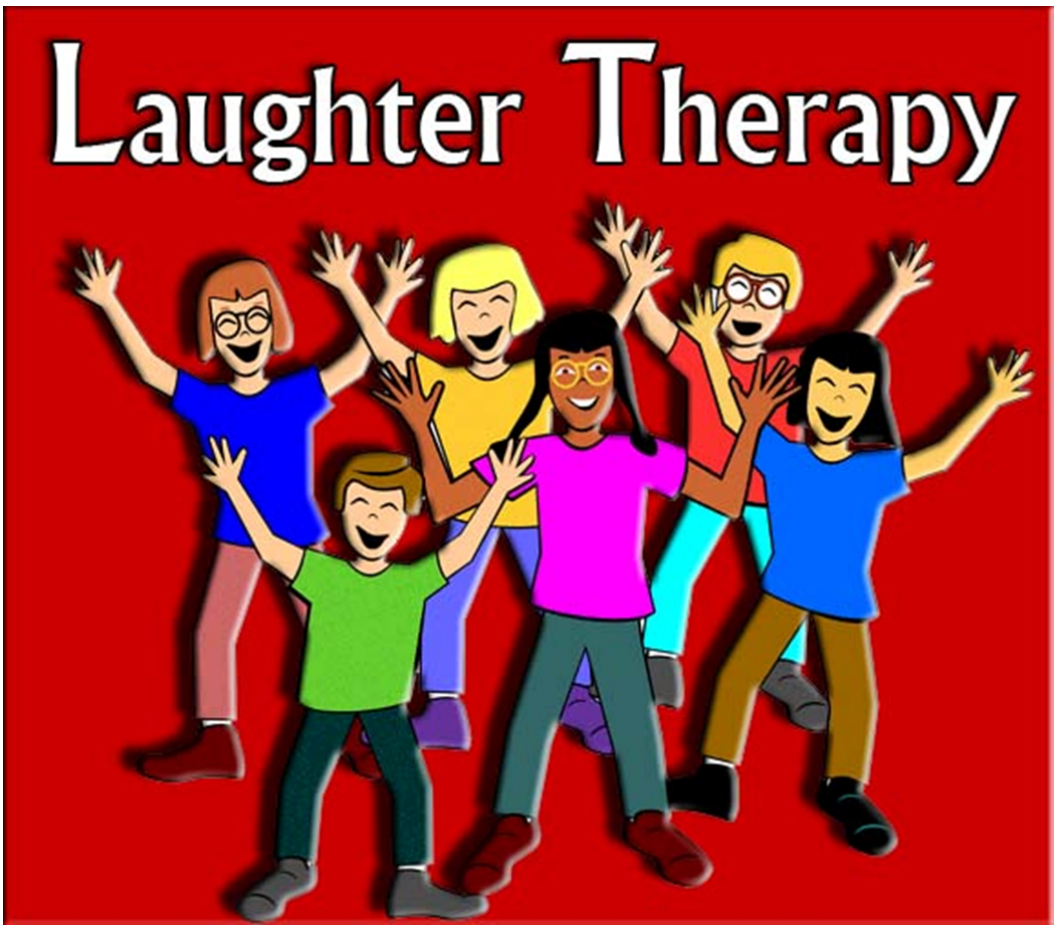
Signature

Name

Designation

Date:

LAUGHTER THERAPY


Laughter Therapy

APPENDIX I

Definition:

Laughter therapy, also called humor therapy, is the use of humor to promote overall health and wellness. It aims to use the natural physiological process of laughter helps to reduce depression.

Effects of laughter therapy:

- Laughter is an aerobic exercise.
- Improves lung capacity.
- Laughter improves sleep, digestion, blood circulation.
- Laughter is a muscle relaxant!
- Exercises the abdominal muscle and muscle of the face.
- Relieves tension.
- Creates the peace and relaxation.
- Reduces nervous energy and inhibitions.
- Strengthens wit and self-confidence.
- Provides new perspectives and develops creative thinking.
- Helps alleviate depression, anger, insomnia, and anxiety.
- Laughter increases serotonin and boast immune system.

Contrindication:

- Advanced (bleeding) piles and haemorrhoids
- Heart disease

- High blood pressure
- Hernia
- Epilepsy

Laughter therapy procedure

- 20 TO 30 minutes program
- Each bout of laughter should last for 30-40 seconds, followed by clapping and "ho ho ha haha" exercise. Take two deep breaths after every laughter exercise.
- Leader punctuates each activity by walking around clapping and saying several times "ho ho ha haha" and after the group picks it up raise arms up and say, "Very Good, Very Good, Yah!".

STEP 1: Clapping in a rhythm 1-2, 1-2-3 along with chanting of "Ho-Ho-Ha-Ha-Ha".

STEP 2: Deep Breathing with inhalation through the nose and prolonged exhalation (3 times).

STEP 3: Shoulder, neck and stretching exercises (5 times each).

STEP 4: Hearty Laughter. Laughter by raising both the arms in the sky with the head tilted a little backwards. Feel as if laughter is coming right from your heart.

STEP 5: Greeting Laughter. Joining both the hands and greeting in Indian style (Namaste) or shaking hands (Western style) with at least 4-5 people in the group.

STEP 6: Appreciation Laughter. Join your pointing finger with the thumb to make a small circle while making gestures as if you are appreciating your group members and laughing simultaneously.

STEP 7: One Meter Laughter. Move one hand over the stretched arm of the other side and extend the shoulder (like stretching to school with a bow and arrow). The hand is moved in three jerks by chanting Ae....., Ae....., Aeee..... and then participants burst into laughter by stretching both the arms and throwing their heads a little backwards and laughing from the belly. (Repeat 4 times).

STEP 8: Silent Laughter (Without Sound) : Open your mouth wide and laugh without making any sound and look into each other's eyes and make some funny gestures.

STEP 9: Humming Laughter (with mouth closed) : Laughter with closed mouth and a humming sound. While humming keep on moving in the group and shaking hands with different people.

STEP 10: Swinging Laughter : Stand in a circle and move towards the center by chanting Aee..... Ooo....Eeee....Uuuu....

STEP 11: Lion Laughter : Extend the tongue fully with eyes wide open and hands stretched out like the claws of a lion and laugh from the tummy.

STEP 12: Cell Phone Laughter : Hold an imaginary mobile phone and try to laugh, making different gestures and moving around in the group to meet different people.

STEP 13: Argument Laughter : Laugh by pointing finger at different group members as if arguing.

STEP 14: Forgiveness / Apology Laughter : Immediately after argument Laughter catch both your ear lobes and laugh while shaking your head (India style) or raise both your palms and laugh as if saying sorry.

STEP 15: Gradient Laughter : Gradient laughter starts with bringing a smile on the face, slowly gently giggles are added and the intensity of laughter is increased further. Then the members gradually burst into hearty laughter and slowly and gradually bring the laughter down and stop.

STEP 16: Intimacy laughter : Come closer and hold each other's hands and laugh. One can shake hands or hug each other, whatever feels comfortable.

CLOSING TECHNIQUES : Shouting 3 Slogans:

- "We are the happiest people in this world " Y.....E.....S
- "We are the healthiest people in this world" Y.....E.....S
- "We are Laughter Club members"Y.....E.....S

In the end all the members should stand with their eyes closed for one minute with their arms spread upwards.

PHOTOGRAPHS